

OCTOBER 2012
SEMI-ANNUAL MONITORING OF
GROUNDWATER AND SURFACE WATER

LINCOLN COUNTY LANDFILL
PERMIT # 55-03
LINCOLN COUNTY
CROUSE, NORTH CAROLINA
S&ME PROJECT No. 1356-07-004

Prepared for:

LINCOLN COUNTY
5291 Crouse Road
Crouse, North Carolina 28033

Prepared by:

S&ME, INC.
9751 Southern Pine Blvd.
Charlotte, North Carolina 28273

Courtney W. Murphy
Courtney W. Murphy, P.G.
Project Geologist

Julie R. Petersen
Julie R. Petersen, P.G.
Project Manager / Senior Geologist

Senior Reviewed by Jason S. Reeves, P.E., Senior Engineer

January 11, 2013

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NC DENR		Environmental Monitoring Reporting Form	
Division of Waste Management - Solid Waste			

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Consultant - S&ME, INC.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Julie R. Petersen, P.G.	Phone: 704-523-4726
E-mail: jpetersen@smeinc.com	

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Lincoln County Landfill	5291 Crouse Rd. Crouse, NC 28033	55-03	.0500 and .1600	October 8 - 10, 2012

Environmental Status: (Check all that apply)

Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action

Type of data submitted: (Check all that apply)

<input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells	<input type="checkbox"/> Methane gas monitoring data
<input type="checkbox"/> Groundwater monitoring data from private water supply wells	<input type="checkbox"/> Corrective action data (specify) _____
<input checked="" type="checkbox"/> Leachate monitoring data	<input type="checkbox"/> Other(specify) _____
<input checked="" type="checkbox"/> Surface water monitoring data	

Notification attached?

- No. No groundwater or surface water standards or explosive methane gas limits were exceeded.
- Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
- Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Julie R. Petersen, P.G.

Project Geologist

704-523-4726

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Signature

1/11/13
Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

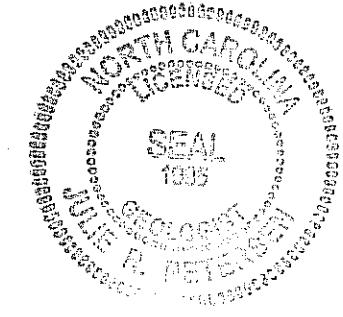


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1.0 INTRODUCTION

S&ME, Inc. (S&ME) was contracted by Lincoln County to provide groundwater, surface water, and leachate monitoring services at the Lincoln County Landfill located at 5291 Crouse Road in Crouse, North Carolina. This semi-annual monitoring event was conducted October 8 through October 10, 2012.

This report presents the results of the second semi-annual sampling event for the year 2012 at the facility. The facility's monitoring network includes one (1) background well (MW-1A), twenty-eight (28) compliance wells, six (6) surface water sample locations, and one (1) leachate sample. The next sampling event is scheduled for April 2013.

2.0 GROUNDWATER LEVELS AND FLOW DATA

The water table elevations and our interpretation of the groundwater surface expressed as a potentiometric map along with groundwater flow direction are shown on *Figure 1*. Based upon the groundwater elevations in the vicinity of the landfill, groundwater in this area is projected to flow primarily to the south, with secondary flow toward the southwest and southeast toward tributaries located east and west of the landfills. Groundwater levels for the monitoring wells are presented in *Table 1*.

3.0 ANALYTICAL DATA

Analytical results for the landfill monitoring wells, surface water samples, and leachate sample are summarized in *Tables 2 through 8*. The detections above the NCAC 2L .0202 Groundwater Quality Standards (2L Standards), NCAC 2B surface water standards (2B Standards), and/or SW GWP Standard are highlighted in grey. Well sampling logs containing field measurements of pH, conductivity, temperature and water levels are included in *Appendix I*.

3.1 Monitoring Well Sampling

3.1.1 MSW Area "E" and Phase 1

MSW Area "E" and Phase 1 monitoring well locations were sampled for Appendix I volatile organic compounds (VOCs) and Appendix I metals. In addition to Appendix I VOCs and metals, the groundwater analysis for background monitoring well MW-1A also included inorganic constituents iron and manganese. A summary of the detected analytes associated with this Phase of the landfill is included as *Table 2*. The monitoring well network associated with these areas include background well MW-1A, compliance wells MW-8, MW-9, and MW-10R that monitor the abandoned leachate pond, and compliance wells MW-12 through MW-20 that monitor down gradient and side gradient of the unlined MSW landfill Area "E" and the lined MSW landfill identified as Phase 1.

Based on the laboratory analytical reports, fourteen VOCs and sixteen metals were detected in MSW Area "E" and Phase 1 monitoring wells during the October 2012

monitoring event. Please note that monitoring wells MW-8, MW-10R, and MW-17 were dry during the October 2012 sampling event, and were not sampled.

3.1.1.1 Volatile Organic Compounds (VOCs)

Background monitoring well MW-1A had a detection of Chloroform at a concentration of 22 micrograms per liter ($\mu\text{g}/\text{L}$), which is below the 2L Standard of 70 $\mu\text{g}/\text{L}$. Both Bromoform and Chloroform have historically been detected in monitoring well MW-1A which are commonly associated with chlorinated municipal water. Due to MW-1A's close proximity to Crouse Road, it is likely the detection of Chloroform in the well is from a leaking nearby municipal water or sewer line.

No VOCs were detected in compliance monitoring wells MW-9, MW-12, MW-15, and MW-18.

Monitoring wells MW-13, MW-14, MW-16R, MW-19, and MW-20 contained one or more of the total fourteen VOCs detected. Of the VOCs detected, five compounds were detected above their respective 2L Standard: 1,1-Dichloroethane, Benzene, Methylene Chloride, Tetrachloroethene, and Vinyl Chloride. Please note that monitoring well MW-14 had no VOC detections above respective 2L Standards.

The analytical results for monitoring well MW-13 indicated that 1,1-Dichloroethane, Benzene, Tetrachloroethene, and Vinyl Chloride were detected above their respective 2L Standards. The results of which are as follows:

- 1,1-Dichloroethane detected at 17 $\mu\text{g}/\text{L}$. 2L Standard is 6 $\mu\text{g}/\text{L}$.
- Benzene detected at 4.8 $\mu\text{g}/\text{L}$. 2L Standard is 1 $\mu\text{g}/\text{L}$.
- Tetrachloroethene detected at 3.7 $\mu\text{g}/\text{L}$. 2L Standard is 0.7 $\mu\text{g}/\text{L}$.
- Vinyl chloride detected at 0.98 $\mu\text{g}/\text{L}$. 2L Standard is 0.03 $\mu\text{g}/\text{L}$.

The results for monitoring well MW-16R indicated that Benzene and Vinyl Chloride were detected above their respective 2L Standard. The results of which are as follows:

- Benzene detected at 5.8 $\mu\text{g}/\text{L}$. 2L Standard is 1 $\mu\text{g}/\text{L}$.
- Vinyl chloride detected at 2.9 $\mu\text{g}/\text{L}$. 2L Standard is 0.03 $\mu\text{g}/\text{L}$.

The results for monitoring well MW-19 indicated that 1,1-Dichloroethane, Benzene, Methylene Chloride, and Tetrachloroethene were detected above their respective 2L Standards. The results of which are as follows:

- 1,1-Dichloroethane detected at 10 $\mu\text{g}/\text{L}$. 2L Standard is 6 $\mu\text{g}/\text{L}$.
- Benzene detected at 1.4 $\mu\text{g}/\text{L}$. 2L Standard is 1 $\mu\text{g}/\text{L}$.
- Methylene Chloride detected 6 $\mu\text{g}/\text{L}$. 2L Standard is 5 $\mu\text{g}/\text{L}$.
- Tetrachloroethene detected at 2.2 $\mu\text{g}/\text{L}$. 2L Standard is 0.7 $\mu\text{g}/\text{L}$.

The results for monitoring well MW-20 indicated that 1,1-Dichloroethane and Benzene were detected above their respective 2L Standards. The results of which are as follows:

- 1,1-Dichloroethane detected at 10 $\mu\text{g}/\text{L}$. 2L Standard is 6 $\mu\text{g}/\text{L}$.
- Benzene detected at 1.3 $\mu\text{g}/\text{L}$. 2L Standard is 1 $\mu\text{g}/\text{L}$.

Monitoring wells MW-13, MW-14, MW-16R, MW-17, MW-19 and MW-20 monitor down gradient and side gradient of the unlined Area "E" landfill, and the volatile organic constituents detected in these wells are associated with the unlined landfill section.

3.1.1.2 Inorganic Constituents (Metals)

The monitoring wells associated with the MSW Area "E" and Phase 1 landfills had one or more Appendix I metals detected. Five constituents were detected above their respective 2L Standard or SW GWP Standard: Antimony, Cobalt, Iron, Thallium, and Vanadium.

Antimony was detected above its SW GWP Standard of 1.4 µg/L in monitoring well MW-14 at a concentration of 4.65 J µg/L.

Cobalt was detected above its SW GWP Standard of 70 µg/L in monitoring well MW-13 at a concentration of 239 µg/L.

Iron was detected above its 2L Standard of 300 µg/L in the background monitoring well MW-1A at a concentration of 660 µg/L.

Thallium was detected above its SW GWP Standard of 0.28 µg/L in monitoring wells MW-13 and MW-16R at concentrations of 0.983 and 6.66 µg/L, respectively.

Vanadium was detected above its SW GWP Standard of 0.3 µg/L in monitoring wells MW-9 and MW-18 at concentrations of 1.57 and 2.04 µg/L, respectively.

Total metal concentrations in groundwater sampled from wells are often dependant on the turbidity or suspended particulates (from the aquifer formation) retrieved with the groundwater sample. The turbidity is a function of the sampling method, well construction, how the well was developed, and the grain size/consolidation of the lithologic unit sampled. Since the unfiltered samples are acidified in the field at the time of collection, metals contained within the particulates are dissolved into the sample. Thus, the presence of turbidity in groundwater samples often results in elevated (false positive) analytical results for total metal concentrations. Therefore, the presence of elevated total metal concentrations does not necessarily correlate with groundwater impact.

Based on historical water quality data, the background well and each of the compliance wells (excluding MW-19) have contained at least one total metal at concentrations above the 2L Standards. Metal concentrations in several wells have fluctuated below and above detection limits. In background well MW-1A, beryllium, cadmium, chromium, cobalt, iron, lead, silver, and vanadium have been detected at concentrations above the 2L Standards. Based on this data, it appears that the majority of the metals detected within the monitoring wells are either naturally occurring or a product of turbidity during sampling.

3.1.2 MSW Phase 2

MSW Phase 2 monitoring well locations were sampled for Appendix I VOCs and Appendix I metals. A summary of the detected analytes associated with this Phase of the landfill is included as **Table 3**. The monitoring well network associated with this Phase is compliance wells MW-21 and MW-24 that monitor side gradient of the landfill and MW-25 and MW-25A that monitor the Phase 2 sump. Please note that monitoring well MW-25 was dry during the October 2012 sampling event and not sampled.

3.1.2.1 Volatile Organic Compounds (VOCs)

No VOCs were detected in the MSW Phase 2 monitoring wells during the October 2012 sampling event.

3.1.2.2 Inorganic Constituents (Metals)

The monitoring wells associated with the Phase 2 landfill had five or more Appendix I metals detections, two of which were detected above their respective 2L Standard or SW GWP Standard. The detections above standards are as follows:

- Antimony was detected above the SW GWP Standard of 1.4 µg/L in monitoring well MW-25A at a concentration of 3.87 µg/L.
- Vanadium was detected above the SW GWP Standard of 0.3 µg/L in monitoring wells MW-21 and MW-25A at concentrations of 1.89 and 3.31 J µg/L, respectively.

As previously discussed above, it appears that the majority of the metals detected within the monitoring wells are either naturally occurring or a product of turbidity during sampling.

3.1.3 MSW Phase 3

MSW Phase 3 monitoring well locations were sampled for Appendix I VOCs and Appendix I metals. A summary of the detected analytes associated with this phase of the landfill is included in **Table 4**. The monitoring well network associated with this area include compliance wells MW-32R and MW-34 that monitor down gradient and side gradient of the landfill and MW-33/33A and MW-35/35A that monitor the Phase 3 sump locations. Please note that monitoring well MW-35 was dry during the October 2012 sampling event and not sampled.

3.1.3.1 Volatile Organic Compounds (VOCs)

No VOCs were detected in the MSW Phase 3 monitoring wells during the October 2012 monitoring event.

3.1.3.2 Inorganic Constituents (Metals)

The monitoring wells associated with the Phase 3 landfill had two or more Appendix I metals detected, two of which were detected above their respective 2L Standard or SW GWP Standard. The detections above standards are as follows:

- Antimony was detected above the SW GWP Standard of 1.4 µg/L in monitoring well MW-33A at a concentration of 2.10 µg/L.
- Vanadium was detected above the SW GWP Standard of 0.3 µg/L in monitoring wells MW-34 and MW-35A at concentrations of 4.29 and 3.43 µg/L, respectively.

As previously discussed above, it appears that the majority of the metals detected within the monitoring wells are either naturally occurring or a product of turbidity during sampling.

3.1.4 C&D Landfill Phase 1 and Phase 2

C&D Landfill Phase 1 and Phase 2 monitoring well locations were sampled for Appendix I VOCs; Appendix I metals plus mercury, manganese, and iron; and four classical chemistry compounds: Chloride, Total Dissolved Solids, Sulfate, and Alkalinity. A summary of the detected analytes associated with the C&D Landfills is included as **Table 5** and **6**. The monitoring well network associated with the C&D landfill include compliance wells MW-26, MW-27, and MW-28 that monitor Phase 1 and MW-29, MW-30, and MW-31 that monitor Phase 2.

3.1.4.1 Volatile Organic Compounds (VOCs)

C&D Landfill monitoring wells had six VOCs detected during the October 2012 monitoring event, two of which were detected above their respective 2L Standard or SW GWP Standard. The detections above standards are as follows:

- Tetrachloroethene was detected in monitoring well MW-28 at a concentration of 6.9 µg/L, which is above the 2L Standard of 0.7 µg/L.
- Vinyl Chloride was detected in monitoring well MW-28 at a concentration of 0.53 µg/L, which is above the 2L standard of 0.03 µg/L.

3.1.4.2 Inorganic Constituents (Metals)

The monitoring wells associated with the C&D landfill had five or more metals detections, and three constituents were detected above their respective 2L Standard and/or SW GWP Standard. The detections above standards are as follows:

- Iron was detected in monitoring wells MW-27, MW-29, MW-30, and MW-31 at concentrations of 704, 1100, 1250, and 7320 µg/L, respectively, which are above the 2L Standard of 300 µg/L.
- Manganese was detected in monitoring well MW-27 at a concentration of 1350 µg/L which is above the 2L Standard of 50 µg/L.
- Vanadium was detected in monitoring wells MW-27 and MW-30 at concentrations of 1.78 and 1.70 µg/L, respectively, which are above the SW GWP Standard of 0.3 µg/L.

As previously discussed above, it appears that the majority of the metals detected within the monitoring wells are either naturally occurring or a product of turbidity during sampling. Since October 2007, Iron and Manganese have been included in the analysis for the C&D wells, and since April 2008, Iron and Manganese were included in the analysis for the background well MW-1A. Iron and Manganese have been detected in MW-1A in each monitoring event that has included their analysis.

3.1.4.3 Classical Chemistry Compounds

Total Dissolved Solids, Chloride, Sulfate, and Alkalinity were analyzed for in the C&D landfill wells. The results of the analyses are summarized in **Tables 5 and 6**. Please note that none of the classical chemistry compounds analyzed for in the C&D landfill wells exceeded any of the established 2L Standards and/or SW GWP Standards.

3.2 Surface Water Sampling

Lincoln County Landfill has five (5) surface water sampling locations positioned in the tributaries located to the east, south, and west of the landfill as indicated on the attached **Figure 1**. The surface water samples were analyzed for Appendix I VOCs and Appendix I metals plus Mercury, Iron and Manganese. Beginning with the April 2010 sampling event, a sixth surface water sample location was added to the semi-annual monitoring plan, SW-6. The addition of SW-6 to the monitoring plan was in response to the January 2009 leachate release at the facility. SW-6 is located at the discharge of the lowland area downgradient from the leachate holding tanks as indicated on the attached **Figure 1**.

Surface water samples from SW-6 are typically analyzed for Appendix I VOCs, Appendix I metals, Biologic Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Nitrate/Nitrite, Sulfate, Total Suspended Solids (TSS), and Phosphorous; however, SW-6 was dry during the October 2012 sampling event as well as, sampling locations SW-3 and SW-5. A summary of the detected analytes associated with the surface water samples collected is included as **Table 7**.

Surface water sampling location SW-1 had three volatile organic compounds detected during the October 2012 sampling event including Bromodichloromethane, Chloroform, and Dibromochloromethane. These constituents are commonly associated with chlorinated municipal water, and it is likely that a source of municipal water entered the stream prior to sampling.

Four or more metals were detected in surface water sampling locations SW-1, SW-2, and SW-4; however, none exceeded their respective 2B Standard.

3.3 Leachate Sampling

A sample of the leachate from the leachate collection system for the landfill was collected from the lift station prior to entering the on-site leachate holding tanks. The leachate sample was analyzed for Appendix I VOCs, Appendix I metals, BOD, COD, Nitrate/Nitrite, Sulfate, TSS, and Phosphorous. A summary of the detected analytes for the leachate is included as **Table 8**.

4.0 STATISTICAL ANALYSIS

S&ME compared the water quality data with the 2L Standards and the SW GWP standards and performed a statistical evaluation of the data. S&ME utilized three statistical methods to evaluate statistically significant increases between the compliance monitoring wells and the background monitoring well (MW-1A).

The first method utilized was a one-way parametric Analysis of Variance (Parametric ANOVA). The parametric ANOVA analysis is recommended by the 1992 guidance document for parameters with fewer than 15% non-detects in a specific well.

The second method used was the Kruskal-Wallis non-parametric rank method. The Kruskal-Wallis method is recommended by the 1992 guidance document for parameters that have 15% to 90% non-detects in a specific well.

The third method used was an inter-well non-parametric prediction limit. The prediction limit was used for parameters with greater than 90% non-detects in a specific well. The 1992 guidance document recommends this method when a significant portion of the samples are non-detect.

Tables 9 through 11 summarize the results of the statistical analysis. Copies of the analytical procedures used to perform the analysis used by the ChemStat® software are included in **Appendix II**. A copy of the statistical analysis results, for parameters with detections, has been included on the attached CD.

4.1 Volatile Organic Compounds (VOCs)

One or more volatile organic compounds were found to have a statistical increase over background concentrations in monitor wells MW-13, MW-14, MW-16, MW-19, and MW-20 that are located downgradient from the unlined closed landfill Area "E". The statistical increases are as follows:

- 1,1-Dichloroethane in wells MW-13, MW-14, MW-16, MW-19 and MW-20. It should be noted that concentrations of 1,1-Dichloroethene in MW-13 and MW-16 have decreased over time.
- 1,4-Dichlorobenzene in wells MW-13 and MW-16.
- Acetone in well MW-13. It should be noted that the concentration of acetone in MW-13 during the October 2012 sampling event was below detection limits.
- Benzene in wells MW-13 and MW-16.
- cis-1,2-Dichloroethene in wells MW-13 and MW-16.
- Chloroethane in wells MW-13 and MW-16. It should be noted that concentrations of Chloroethane in wells MW-13 and MW-16 have decreased over time and the concentrations in MW-16 have been below detection limits since October 2011.
- Methylene Chloride in wells MW-13, MW-16, MW-19 and MW-20. It should be noted that concentrations of Methylene Chloride in MW-13, MW-16, MW-19 and MW-20 have decreased over time, and the concentrations in MW-16 have been below detection limits since October 2011.
- Tetrachloroethene in wells MW-13 and MW-19.
- Trichloroethene in wells MW-13 and MW-19.
- Vinyl Chloride in well MW-16. It should be noted that concentrations of Vinyl Chloride in MW-16 have decreased over time.
- Total Xylenes in wells MW-13 and MW-16. It should be noted that concentrations of total Xylenes in MW-16 have decreased over time.

There were no volatile organic compounds with statistically significant increases over background for the Phase 2 and Phase 3 MSW wells. Graphs depicting concentrations over time for constituents with a statistical increase are provided in *Appendix III*.

4.2 Total Metals

Total metal concentrations in groundwater sampled from wells are often dependent on the turbidity or suspended particulates (from the aquifer formation) retrieved with the groundwater sample. The turbidity is a function of the sampling method, well construction, how the well was developed, and the grain size/consolidation of the lithologic unit sampled. Since the unfiltered samples are acidified in the field at the time of sample collection, metals contained within the particulates are dissolved into the water sample. Thus, the presence of turbidity in groundwater samples often results in elevated (false positive) analytical results for total metal concentrations. Therefore, the presence of elevated total metal concentrations does not necessarily correlate with groundwater impact.

Based on the historical water quality data, the background well and each of the compliance wells (excluding MW-19, 22, 24 and 25) have contained at least one total metal at concentrations above the 2L Standards. The statistical evaluation indicates that eight of the compliance wells (MW-8, 12, 13, 15, 16, 17, 33A, and 34,) contained at least one metal at a statistically significant level higher than the background well. Metal concentrations in several wells have fluctuated between non-detect and detect. In the background well, MW-1A, beryllium, cadmium, chromium, cobalt, iron, lead, silver, and vanadium have been detected at concentrations above the 2L Standards. Graphs depicting concentrations over time for constituents with a statistical increase are provided in *Appendix III*.

TABLES

Table 1
October 2012 - Water Level Elevations
Lincoln County Landfill
S&ME Project No. 1356-07-004

Well Identification		Top of Casing Elevation (ft - MSL)	Depth to Groundwater From Top of Casing (ft)	Groundwater Elevation (ft - MSL)
Background Well	MW-1A	929.27	43.93	885.34
Leachate Lagoon	MW-8	840.03	>31.00	<809.03
Leachate Lagoon	MW-9	840.20	36.61	803.59
Leachate Lagoon	MW-10R	834.97	30.60	804.37
Area "E" and Phase 1	MW-12	827.57	13.48	814.09
Area "E" and Phase 1	MW-13	872.78	33.36	839.42
Area "E" and Phase 1	MW-14	871.44	31.80	839.64
Area "E" and Phase 1	MW-15	847.86	28.45	819.41
Area "E" and Phase 1	MW-16R	876.39	17.63	858.76
Area "E" and Phase 1	MW-17	899.64	36.00	863.64
Area "E" and Phase 1	MW-18	861.41	22.95	838.46
Area "E" and Phase 1	MW-19	862.40	27.52	834.88
Area "E" and Phase 1	MW-20	860.00	16.22	843.78
Phase 2	MW-21	855.91	40.53	815.38
Phase 2	MW-24	841.13	27.80	813.33
Phase 2	MW-25	838.73	>31.50	<807.23
Phase 2	MW-25A	838.84	32.11	806.73
C&D Phase 1	MW-26	871.19	14.32	856.87
C&D Phase 1	MW-27	880.90	19.06	861.84
C&D Phase 1	MW-28	915.68	45.78	869.90
C&D Phase 2	MW-29	879.97	39.57	840.40
C&D Phase 2	MW-30	886.35	54.71	831.64
C&D Phase 2	MW-31	879.88	32.55	847.33
Phase 3	MW-32R	827.25	18.74	808.51
Phase 3	MW-33	819.38	16.28	803.10
Phase 3	MW-33A	818.67	16.22	802.45
Phase 3	MW-34	832.77	31.51	801.26
Phase 3	MW-35	839.64	36.55	803.09
Phase 3	MW-35A	839.65	37.10	802.55

Notes:

(ft - MSL) - Feet Mean Sea Level

(ft) - Feet

The "A" suffix on the well locations indicates the deep well of the pair.

Notes for Tables 2 through 8
S&ME Project No. 1356-07-004

Notes:

- (1) ug/L = micrograms per liter (parts per billion)
- (2) mg/L = milligrams per liter (parts per million)
- (3) 15A NCAC 2L = North Carolina Groundwater Quality Standards
- (4) 15A NCAC 2B = North Carolina Surface Water Quality Standards
- (5) GWP ST = Solid Waste Groundwater Protection Standard
- (6) NE = No established standard
- (7) Bold and highlighted indicates above 15A NCAC 2L, 15A NCAC 2B, or SW GWP standard
- (8) Compounds not shown were not detected.
- (9) SWSL = North Carolina Department of Environment and Natural Resources Solid Waste Section Limit established in 2007
- (10) NA = Not Analyzed
- (11) J = Analyte detected is between the Method Detection Limit (MDL) and the SWSL
- (12) B = Analyte was detected in the associated method blank
- (13) D = The sample was analyzed at dilution

Table 2
October 2012 - Detected Analytes in Monitoring Wells for MSW Area "E" and Phase 1
Lincoln County Landfill
S&ME Project No. 1356-07-004

EPA Appendix I Volatile Organic Compounds Method 8260 (ug/L)	NCDENR SWSL	15A NCAC 2L	Soild Waste GWP ST	MW-1A	MW-8	MW-9	MW-10R	MW-12	MW-13	MW-14	MW-15	MW-16R	MW-17	MW-18	MW-19	MW-20	
1,1-Dichloroethane	5	6	NE		DRY		DRY		17	2.0 J		3.8 J	DRY		10	10	
1,4 - Dichlorobenzene	1	6	NE						2.9			3.4			0.44 J		
cis-1,2,-Dichloroethene	5	70	NE						2.5 J			11			0.90 J	2.5 J	
Benzene	1	1	NE						4.8			5.8			1.4	1.3	
Chlorobenzene	3	50	NE						0.44 J			3.4					
Chloroform	5	70	NE	22													
Ethylbenzene	1	600	NE									0.46 J					
Ethyl Chloride (Chloroethane)	10	3000	NE						2.2 J								
Methylene Chloride	1	5	NE						0.96 J						6	2.9	
Tetrachloroethene	1	0.7	NE						3.7	0.64 J					2.2	0.78 J	
Trichloroethene	1	3	NE						2.4						1.5	1.1	
Trichlorofluoromethane	1	2000	NE												0.61 J		
Vinyl chloride	1	0.03	NE						0.98 J			2.9					
Xylenes (total)	5	500	NE						1.7 J			0.93 J			1.6 J	1.3 J	
EPA Appendix I Metals Method 6010B/6020 (ug/L)																	
Antimony	6	NE	1.4	1.17 J		0.997 J				4.65 J						0.571 J	
Arsenic	10	10	NE						8.09 J	4.75 J	4.92 J	9.46 J					
Barium	100	700	NE	28.7 J		29.3 J		175	87.6 J	24.9 J	77.2 J	397	57.9 J	29.9 J	67.5 J		
Beryllium	1	NE	4						0.122 J			0.308 J	0.137 J			0.104 J	
Cadmium	1	2	NE										0.387 J				
Chromium	10	10	NE	3.79 J		2.67 J			2.17 J			9.93 J		1.04 J			
Cobalt	10	NE	70					17.3	239				69.4			2.91 J	
Copper	10	1000	NE	2.56 J						5.5 J				4.92 J			
Iron	300	300	NE	660													
Lead	10	15	NE	2.33 J				1.96 J				7.58 J			2.17 J		
Manganese	50	50	NE	17.2 J													
Nickel	50	100	NE	2.79 J				6.02 J	16.2 J	2.39 J		41.8 J		2.51 J		2.08 J	
Silver	10	20	NE										4.41 J				
Thallium	5.5	NE	0.28					0.136 J	0.983 J				6.66		0.176 J		
Vanadium	25	NE	0.3			1.57 J								2.04 J			
Zinc	10	1000	NE	14.9	▼	4.42 J	▼	38.2	10.4	25.5	5.76 J	48.8	▼	8.45 J	9.48 J	7.67 J	

Table 3
October 2012 - Detected Analytes in Monitoring Wells for MSW Phase 2
Lincoln County Landfill
S&ME Project No. 1356-07-004

EPA Appendix I Volatile Organic Compounds Method 8260 (ug/L)	NCDENR SWSL	15A NCAC 2L	Soild Waste GWP ST	MW-21	MW-24	MW-25	MW-25A
<i>No Volatile Organic Compounds Detected in MSW Phase 2 Wells During October 2012 Sampling Event</i>							
EPA Appendix I Metals Method 6010B/6020 (ug/L)							
Antimony	6	NE	1.4			DRY	3.87 J
Arsenic	10	10	NE		4.30 J		
Barium	100	700	NE	43.5 J	116		51.0 J
Beryllium	1	NE	4	0.138 J	0.716 J		
Chromium	10	10	NE	1.20 J			7.47 J
Cobalt	10	NE	70				11
Copper	10	1000	NE		3.62 J		
Lead	10	15	NE				4.90 J
Vanadium	25	NE	0.3	1.89 J			4.14 J
Zinc	10	1000	NE	5.50 J	18.6	▼	15.3

Table 4
October 2012 - Detected Analytes in Monitoring Wells for MSW Phase 3
Lincoln County Landfill
S&ME Project No. 1356-07-004

EPA Appendix I Volatile Organic Compounds Method 8260 (ug/L)	NCDENR SWSL	15A NCAC 2L	Soild Waste GWP ST	MW-32R	MW-33	MW-33A	MW-34	MW-35	MW-35A
<i>No Volatile Organic Compounds Detected in MSW Phase 3 Wells During October 2012 Sampling Event</i>									
EPA Appendix I Metals Method 6010B/6020 (ug/L)									
Antimony	6	NE	1.4			2.10 J		DRY	0.640 J
Barium	100	700	NE	10.3 J	46.3 J	6.02 J	202		43.7 J
Beryllium	1	NE	4		0.181 J		1.18		
Chromium	10	10	NE						3.07 J
Cobalt	10	NE	70				4.30 J		
Copper	10	1000	NE			2.00 J	3.38 J		
Lead	10	15	NE			4.61 J			
Nickel	50	100	NE				2.84 J		
Thallium	5.5	NE	0.28				0.203 J		
Vanadium	25	NE	0.3				4.29 J		3.43 J
Zinc	10	1000	NE	5.50 J	7.22 J	19.8	19.7	▼	9.62 J

Table 5
October 2012 - Detected Analytes in Monitoring Wells for C&D Phase 1
Lincoln County Landfill
S&ME Project No. 1356-07-004

EPA Appendix I Volatile Organic Compounds Method 8260 (ug/L)	NCDENR SWSL	15A NCAC 2L	Soild Waste GWP ST	MW-26	MW-27	MW-28
Acetone	100	6000	NE			22 J
Benzene	1	1	NE		0.53 J	
Tetrachloroethene	1	0.7	NE			6.9
Tetrahydrofuran	NE	NE	NE		14	
Trichlorofluoromethane	1	2000	NE			0.42 J
Vinyl chloride	1	0.03	NE			0.53 J
EPA Appendix I Metals Method 6010B/6020 (ug/L)						
Barium	100	700	NE	91.6 J	355	77.3 J
Beryllium	1	NE	4		0.479 J	0.120 J
Cadmium	1	2	NE		0.380 J	
Chromium	10	10	NE	2.74 J	1.49 J	
Cobalt	10	NE	70		15.2	1.68 J
Copper	10	1000	NE	2.20 J		
Iron	300	300	NE	276 J	704	39.1 J
Lead	10	15	NE		2.65 J	
Manganese	50	50	NE	7.82 JB	1350 B	18.5 JB
Nickel	50	100	NE		23.7 J	3.75 J
Thallium	5.5	NE	0.28		0.139 J	
Vanadium	25	NE	0.3		1.78 J	
Zinc	10	1000	NE	12.8	20.3	8.04 J
Classical Chemistry Compounds (mg/L)						
Chloride	NE	250	NE	3.3 JB	21 B	2.2 JB
Sulfate as SO4	250	250	NE	3.4 J	48 J	2.0 J
Total Dissolved Solids	NE	500	NE	100	330	110
Total Alkalinity	NE	NE	NE	34	62	

Table 6
October 2012 - Detected Analytes in Monitoring Wells for C&D Phase 2
Lincoln County Landfill
S&ME Project No. 1356-07-004

EPA Appendix I Volatile Organic Compounds Method 8260 (ug/L)	NCDENR SWSL	15A NCAC 2L	Soild Waste GWP ST	MW-29	MW-30	MW-31
Acetone	100	6000	NE	18 J		
EPA Appendix I Metals Method 6010B/6020 (ug/L)						
Arsenic	10	10	NE			
Barium	100	700	NE	11.7 J	54.4 J	7.36 J
Chromium	10	10	NE		1.03 J	
Copper	10	1000	NE	3.30 J	2.58 J	3.38 J
Iron	300	300	NE	11,100	1,250	7,320
Lead	10	15	NE		2.01 J	
Manganese	50	50	NE	43.0 JB	24.6 JB	38.7 JB
Nickel	50	100	NE		2.64 J	
Thallium	5.5	NE	0.28	0.238 J		
Vanadium	25	NE	0.3		1.70 J	
Zinc	10	1000	NE	5.55 J	7.63 J	12.9
Classical Chemistry Compounds (mg/L)						
Chloride	NE	250	NE	4.2 JB	2.3 JB	2.4 JB
Sulfate as SO4	250	250	NE	7.2 J	4 J	11 J
Total Dissolved Solids	NE	500	NE	140	110	150
Total Alkalinity	NE	NE	NE	74	13 J	16

Table 7
October 2012 - Detected Analytes in Surface Water Samples
Lincoln County Landfill
S&ME Project No. 1356-07-004

EPA Appendix I Volatile Organic Compounds Method 8260 (ug/L)	15A NCAC 2B	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6
Bromodichloromethane	NE	1.2		DRY		DRY	DRY
Chloroform	NE	1.2 J					
Dibromochloromethane	NE	1.3 J					
EPA Appendix I Metals Method 6010B/6020 (ug/L)							
Antimony	640	0.278 J					
Arsenic	50		5.69 J				
Barium	200,000	16.7 J	21.4 J		30.7 J		
Iron	1,000	455	495		366		
Manganese	NE	37.6 JB	15.4 JB		27.4 JB		
Thallium	0.47				0.256 J		
Vanadium	NE	1.63 J	1.72 J				
Zinc	50	8.54 J		▼		▼	
Classical Chemistry Compounds (mg/L)							
BOD	NE	NA	NA	NA	NA	NA	
COD	NE	NA	NA	NA	NA	NA	
Sulfate	NE	NA	NA	NA	NA	NA	
Sulfate as SO4	NE	NA	NA	NA	NA	NA	
Phosphorous	NE	NA	NA	NA	NA	NA	
Nitrate as N	NE	NA	NA	NA	NA	NA	
Nitrite as N	2.7	NA	NA	NA	NA	NA	
Nitrate/Nitrite as N	NE	NA	NA	NA	NA	NA	
Total Alkalinity	NE	NA	NA	NA	NA	NA	
Total Suspended Solids	NE	NA	NA	NA	NA	NA	▼

Table 8
October 2012 - Detected Analytes in Leachate
Lincoln County Landfill
S&ME Project No. 1356-07-004

EPA Appendix I Volatile Organic Compounds Method 8260 (ug/L)	NCDENR SWSL	Lift Station
<i>No Volatile Organic Compounds Detected During the October 2012 Sampling Event</i>		
EPA Appendix I Metals Method 6010B/6020 (ug/L)		
Arsenic	10	118
Barium	100	573
Chromium	10	18.2
Cobalt	10	15.3
Lead	10	2.29 J
Nickel	50	40.7 J
Vanadium	25	12.8
Zinc	10	57.5
Classical Chemistry Compounds (mg/L)		
BOD	NE	56
COD	NE	440
Sulfate as SO4	250	6.2 J
Phosphorous	NE	1
Nitrate as N	10	0.040 J
Nitrite as N	1000	0.130 JB
Nitrate/Nitrite as N	NE	0.17
Total Alkalinity	NE	1400 D
Total Suspended Solids	NE	150

Notes for Tables 9 through 11
S&ME Project No. 1356-07-004

Notes:

- (1) SSI = Statistically Significant Increase
- (2) PA = One Way Parametric Analysis of Variance (Parametric ANOVA)
The parametric ANOVA analysis is recommended by the 1992 guidance document for parameters with fewer than 15% non-detects in a specific well.
- (3) KW = Kruskal Wallis Non-Parametric Rank Analysis
The Kruskal-Wallis method is recommended by the 1992 guidance document for parameters that have 15% to 90% non-detects in a specific well.
- (4) PL = Non-Parametric Inter-Well Prediction Limit Analysis
The prediction limit was used for parameters with greater than 90% non-detects in a specific well.
The 1992 guidance document recommends this method when a significant portion of the samples are non-detect.

Table 9
October 2012 Statistical Analysis for Phase 1 and Area "E"
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
1,1,1-Trichloroethane	MW-13	87%	KW	FALSE	
1,1-Dichloroethane	MW-13	3%	PA	TRUE	Concentrations have decreased over time
	MW-14	62%	KW	TRUE	
	MW-16	32%	KW	TRUE	Concentrations have decreased over time
	MW-17	97%	PL	FALSE	
	MW-19	41%	KW	TRUE	
	MW-20	41%	KW	TRUE	
1,1-Dichloroethene	MW-16	97%	PL	FALSE	
	MW-19	97%	PL	FALSE	
1,2-Dichloroethane	MW-13	95%	PL	FALSE	
1,4-Dichlorobenzene	MW-13	67%	KW	TRUE	October 2012 concentration was non-detect
	MW-16	68%	KW	TRUE	
	MW-19	94%	PL	FALSE	
	MW-20	91%	PL	FALSE	
2-Butanone	MW-13	97%	PL	FALSE	
Acetone	MW-12	97%	PL	FALSE	October 2012 concentration was non-detect
	MW-13	59%	KW	TRUE	
	MW-14	97%	PL	FALSE	
	MW-16	89%	KW	FALSE	
	MW-17	78%	KW	FALSE	
	MW-15	97%	PL	FALSE	
	MW-9	97%	PL	FALSE	
	MW-18	97%	PL	FALSE	
	MW-19	94%	PL	FALSE	
	MW-20	97%	PL	FALSE	
Antimony	MW-12	95%	PL	FALSE	October 2012 concentration was non-detect
	MW-13	92%	PL	FALSE	
	MW-14	67%	KW	FALSE	
	MW-16	97%	PL	FALSE	
	MW-10	94%	PL	FALSE	
	MW-9	89%	KW	FALSE	
	MW-18	91%	PL	FALSE	
	MW-19	72%	KW	FALSE	
	MW-20	94%	PL	FALSE	
	MW-12	79%	KW	FALSE	
Arsenic	MW-13	54%	KW	TRUE	October 2012 concentration was non-detect
	MW-14	92%	PL	FALSE	
	MW-16	68%	KW	FALSE	
	MW-17	94%	PL	FALSE	
	MW-10	89%	KW	FALSE	
	MW-15	89%	KW	FALSE	
	MW-8	88%	KW	FALSE	
	MW-9	92%	PL	FALSE	
	MW-18	88%	KW	FALSE	
	MW-19	88%	KW	FALSE	
	MW-20	81%	KW	FALSE	
	MW-12	46%	KW	FALSE	
Barium	MW-13	41%	KW	FALSE	October 2012 concentration was non-detect
	MW-14	54%	KW	FALSE	
	MW-16	42%	KW	TRUE	
	MW-17	42%	KW	FALSE	
	MW-10	29%	KW	FALSE	
	MW-15	26%	KW	TRUE	
	MW-8	44%	KW	FALSE	
	MW-9	42%	KW	FALSE	
	MW-18	41%	KW	FALSE	
	MW-19	63%	KW	FALSE	
Benzene	MW-13	41%	KW	TRUE	October 2012 concentration was non-detect
	MW-16	63%	KW	TRUE	

Table 9
October 2012 Statistical Analysis for Phase 1 and Area "E"
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
Beryllium	MW-19	81%	KW	FALSE	
	MW-20	72%	KW	FALSE	
	MW-12	67%	KW	FALSE	
	MW-13	72%	KW	FALSE	
	MW-14	97%	PL	FALSE	
	MW-16	76%	KW	FALSE	
	MW-17	67%	KW	FALSE	
	MW-10	60%	KW	FALSE	
	MW-15	47%	KW	FALSE	
	MW-8	52%	KW	FALSE	
cis-1,2-Dichloroethene	MW-9	87%	KW	FALSE	
	MW-18	84%	KW	FALSE	
	MW-19	94%	PL	FALSE	
	MW-20	72%	KW	FALSE	
cis-1,3-Dichloropropene	MW-13	56%	KW	TRUE	
	MW-16	61%	KW	TRUE	
	MW-19	72%	KW	FALSE	
	MW-20	72%	KW	FALSE	
cadmium	MW-12	97.4%	PL	FALSE	
Cadmium	MW-12	64%	KW	FALSE	
	MW-13	69%	KW	FALSE	
	MW-14	72%	KW	FALSE	
	MW-16	68%	KW	FALSE	
	MW-17	75%	KW	FALSE	
	MW-10	71%	KW	FALSE	
	MW-15	74%	KW	FALSE	
	MW-8	72%	KW	FALSE	
	MW-9	87%	KW	FALSE	
	MW-18	88%	KW	FALSE	
Chlorobenzene	MW-19	97%	PL	FALSE	
	MW-20	84%	KW	FALSE	
Chloroethane	MW-13	90%	KW	FALSE	
	MW-16	74%	KW	FALSE	
	MW-13	36%	KW	TRUE	Concentrations have decreased over time Concentrations have been non-detect since Oct 2011
	MW-16	55%	KW	TRUE	
Chloromethane	MW-19	97%	PL	FALSE	
	MW-20	84%	KW	FALSE	
	MW-10	97%	PL	FALSE	
	MW-12	97%	PL	FALSE	
	MW-13	97%	PL	FALSE	
	MW-16	97%	PL	FALSE	
Chromium	MW-9	97%	PL	FALSE	
	MW-20	97%	PL	FALSE	
	MW-12	77%	KW	FALSE	
	MW-13	46%	KW	FALSE	
	MW-14	82%	KW	FALSE	
	MW-16	58%	KW	FALSE	
	MW-17	50%	KW	FALSE	
	MW-10	40%	KW	FALSE	
	MW-15	71%	KW	FALSE	
	MW-8	36%	KW	FALSE	

Table 9
October 2012 Statistical Analysis for Phase 1 and Area "E"
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
Cobalt	MW-12	36%	KW	TRUE	
	MW-13	0%	PA	TRUE	
	MW-14	87%	KW	FALSE	
	MW-16	11%	PA	FALSE	
	MW-17	47%	KW	TRUE	
	MW-10	63%	KW	FALSE	
	MW-15	71%	KW	FALSE	
	MW-8	32%	KW	TRUE	
	MW-9	89%	KW	FALSE	
	MW-18	66%	KW	FALSE	
Copper	MW-20	66%	KW	FALSE	
	MW-12	74%	KW	FALSE	
	MW-13	72%	KW	FALSE	
	MW-14	51%	KW	FALSE	
	MW-16	92%	PL	FALSE	
	MW-17	72%	KW	FALSE	
	MW-10	69%	KW	FALSE	
	MW-15	74%	KW	FALSE	
	MW-8	60%	KW	FALSE	
	MW-9	68%	KW	FALSE	
Ethylbenzene	MW-18	66%	KW	FALSE	
	MW-19	81%	KW	FALSE	
Lead	MW-20	94%	PL	FALSE	
	MW-13	77%	KW	FALSE	
	MW-16	95%	PL	FALSE	
	MW-12	85%	KW	FALSE	
	MW-13	67%	KW	FALSE	
	MW-14	92%	PL	FALSE	
	MW-16	50%	KW	FALSE	
	MW-17	83%	KW	FALSE	
	MW-10	66%	KW	FALSE	
	MW-15	68%	KW	FALSE	
Methylene Chloride	MW-8	56%	KW	FALSE	
	MW-9	84%	KW	FALSE	
	MW-18	94%	PL	FALSE	
	MW-19	94%	PL	FALSE	
	MW-20	84%	KW	FALSE	
	MW-12	97%	PL	FALSE	
	MW-13	41%	KW	TRUE	Concentrations have decreased over time
	MW-14	92%	PL	FALSE	
	MW-16	50%	KW	TRUE	Concentrations have been non-detect since Oct 2011
	MW-19	53%	KW	TRUE	Concentrations have decreased over time
	MW-20	47%	KW	TRUE	Concentrations have decreased over time
	MW-12	69%	KW	FALSE	
Nickel	MW-13	56%	KW	FALSE	
	MW-14	79%	KW	FALSE	
	MW-16	66%	KW	FALSE	
	MW-17	56%	KW	FALSE	
	MW-10	80%	KW	FALSE	
	MW-15	95%	PL	FALSE	
	MW-8	64%	KW	FALSE	
	MW-9	97%	PL	FALSE	
	MW-18	72%	KW	FALSE	
	MW-19	97%	PL	FALSE	
	MW-20	84%	KW	FALSE	

Table 9
October 2012 Statistical Analysis for Phase 1 and Area "E"
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
Selenium	MW-13	97%	PL	FALSE	
	MW-16	84%	KW	FALSE	
	MW-17	97%	PL	FALSE	
	MW-10	94%	PL	FALSE	
	MW-15	97%	PL	FALSE	
	MW-8	96%	PL	FALSE	
	MW-18	94%	PL	FALSE	
	MW-19	97%	PL	FALSE	
	MW-20	94%	PL	FALSE	
Silver	MW-12	97%	PL	FALSE	
	MW-13	90%	KW	FALSE	
	MW-14	95%	PL	FALSE	
	MW-16	79%	KW	FALSE	
	MW-17	97%	PL	FALSE	
	MW-10	94%	PL	FALSE	
	MW-15	97%	PL	FALSE	
	MW-8	96%	PL	FALSE	
	MW-9	97%	PL	FALSE	
	MW-19	97%	PL	FALSE	
Tetrachloroethene	MW-13	59%	KW	TRUE	
	MW-14	82%	KW	FALSE	
	MW-17	83%	KW	FALSE	
	MW-19	59%	KW	TRUE	
	MW-20	75%	KW	FALSE	
	MW-12	77%	KW	FALSE	
Thallium	MW-13	54%	KW	FALSE	
	MW-14	92%	PL	FALSE	
	MW-16	63%	KW	FALSE	
	MW-17	97%	PL	FALSE	
	MW-10	91%	PL	FALSE	
	MW-15	87%	KW	FALSE	
	MW-8	80%	KW	FALSE	
	MW-18	72%	KW	FALSE	
	MW-19	97%	PL	FALSE	
	MW-12	97%	PL	FALSE	
Toluene	MW-13	72%	KW	FALSE	
	MW-12	97%	PL	FALSE	
Trichloroethene	MW-13	59%	KW	TRUE	
	MW-14	95%	PL	FALSE	
	MW-16	95%	PL	FALSE	
	MW-17	94%	PL	FALSE	
	MW-19	66%	KW	TRUE	
	MW-20	72%	KW	FALSE	
Trichlorofluoromethane	MW-16	89%	KW	FALSE	
	MW-19	72%	KW	FALSE	
Vanadium	MW-12	85%	KW	FALSE	
	MW-13	67%	KW	FALSE	
	MW-14	79%	KW	FALSE	
	MW-16	87%	KW	FALSE	
	MW-17	75%	KW	FALSE	
	MW-10	37%	KW	FALSE	
	MW-15	58%	KW	FALSE	
	MW-8	36%	KW	FALSE	
	MW-9	63%	KW	FALSE	
	MW-18	69%	KW	FALSE	
	MW-19	88%	KW	FALSE	
	MW-20	88%	KW	FALSE	

Table 9
October 2012 Statistical Analysis for Phase 1 and Area "E"
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
Vinyl Chloride	MW-12	97%	PL	FALSE	Concentrations have decreased over time
	MW-13	72%	KW	FALSE	
	MW-16	34%	KW	TRUE	
	MW-20	88%	KW	FALSE	
Xylenes (Total)	MW-13	50%	KW	TRUE	Concentrations have decreased over time
	MW-16	53%	KW	TRUE	
	MW-19	81%	KW	FALSE	
	MW-20	78%	KW	FALSE	
Zinc	MW-12	0%	PA	TRUE	Concentrations have decreased over time
	MW-13	38%	KW	FALSE	
	MW-14	56%	KW	FALSE	
	MW-16	32%	KW	FALSE	
	MW-17	44%	KW	FALSE	
	MW-10	34%	KW	FALSE	
	MW-15	53%	KW	FALSE	
	MW-8	40%	KW	FALSE	
	MW-9	58%	KW	FALSE	
	MW-18	56%	KW	FALSE	
	MW-19	69%	KW	FALSE	
	MW-20	66%	KW	FALSE	

Table 10
October 2012 Statistical Analysis for Phase 2
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
Acetone	MW-21	93%	PL	FALSE	
	MW-24	97%	PL	FALSE	
	MW-25	96%	PL	FALSE	
	MW-25A	86%	KW	FALSE	
Antimony	MW-21	97%	PL	FALSE	
	MW-25A	59%	KW	FALSE	
Arsenic	MW-21	93%	PL	FALSE	
	MW-24	86%	KW	FALSE	
	MW-25	86%	KW	FALSE	
	MW-25A	83%	KW	FALSE	
Barium	MW-21	41%	KW	FALSE	
	MW-24	48%	KW	FALSE	
	MW-25	50%	KW	FALSE	
	MW-25A	41%	KW	FALSE	
Beryllium	MW-21	62%	KW	FALSE	
	MW-24	66%	KW	FALSE	
	MW-25	68%	KW	FALSE	
	MW-25A	83%	KW	FALSE	
Cadmium	MW-21	86%	KW	FALSE	
	MW-24	90%	KW	FALSE	
	MW-25	93%	PL	FALSE	
	MW-25A	83%	KW	FALSE	
Chloromethane	MW-21	97%	PL	FALSE	
	MW-25	96%	PL	FALSE	
	MW-25A	97%	PL	FALSE	
Chromium	MW-21	76%	KW	FALSE	
	MW-24	72%	KW	FALSE	
	MW-25	54%	KW	FALSE	
	MW-25A	38%	KW	FALSE	
Cobalt	MW-21	90%	KW	FALSE	
	MW-24	93%	PL	FALSE	
	MW-25A	62%	KW	FALSE	
Copper	MW-21	79%	KW	FALSE	
	MW-24	79%	KW	FALSE	
	MW-25	82%	KW	FALSE	
	MW-25A	79%	KW	FALSE	
Lead	MW-21	90%	KW	FALSE	
	MW-24	97%	PL	FALSE	
	MW-25A	93%	PL	FALSE	
Nickel	MW-21	90%	KW	FALSE	
	MW-24	90%	KW	FALSE	
	MW-25	86%	KW	FALSE	
Selenium	MW-21	97%	PL	FALSE	
	MW-25	96%	PL	FALSE	
Silver	MW-24	97%	PL	FALSE	
	MW-25	96%	PL	FALSE	
	MW-25A	97%	PL	FALSE	
Thallium	MW-21	97%	PL	FALSE	
	MW-24	93%	PL	FALSE	
	MW-25	93%	PL	FALSE	
Vanadium	MW-21	66%	KW	FALSE	
	MW-24	86%	KW	FALSE	
	MW-25	93%	PL	FALSE	
	MW-25A	55%	KW	FALSE	
Zinc	MW-21	69%	KW	FALSE	
	MW-24	55%	KW	FALSE	
	MW-25	57%	KW	FALSE	
	MW-25A	55%	KW	FALSE	

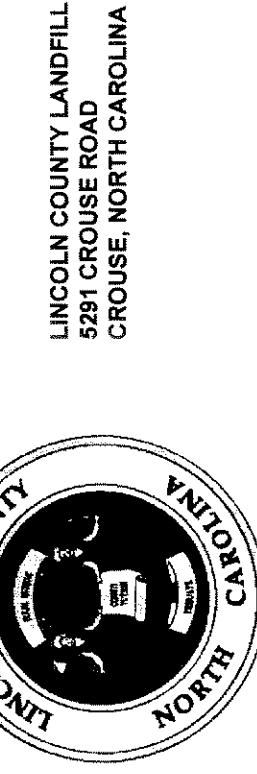
Table 11
October 2012 Statistical Analysis for Phase 3
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
Acetone	MW-32	94%	PL	FALSE	
	MW-33	94%	PL	FALSE	
	MW-33A	89%	KW	FALSE	
	MW-34	94%	PL	FALSE	
	MW-35	94%	PL	FALSE	
	MW-35A	89%	KW	FALSE	
Antimony	MW-32	94%	PL	FALSE	
	MW-33	94%	PL	FALSE	
	MW-33A	39%	KW	TRUE	
	MW-34	94%	PL	FALSE	
	MW-35	88%	KW	FALSE	
	MW-35A	67%	KW	FALSE	
Arsenic	MW-32	83%	KW	FALSE	
	MW-33	83%	KW	FALSE	
	MW-33A	94%	PL	FALSE	
	MW-34	94%	PL	FALSE	
	MW-35	94%	PL	FALSE	
	MW-35A	83%	KW	FALSE	
Barium	MW-32	11%	PA	FALSE	
	MW-33	11%	PA	FALSE	
	MW-33A	33%	KW	FALSE	
	MW-34	11%	PA	FALSE	
	MW-35	12%	PA	FALSE	
	MW-35A	11%	PA	FALSE	
Beryllium	MW-32	50%	KW	FALSE	
	MW-33	61%	KW	FALSE	
	MW-33A	94%	PL	FALSE	
	MW-34	50%	KW	FALSE	
	MW-35	53%	KW	FALSE	
	MW-35A	78%	KW	FALSE	
Cadmium	MW-33A	94%	PL	FALSE	
Chloroform	MW-33A	78%	KW	FALSE	
	MW-35A	94%	PL	FALSE	
Chromium	MW-32	67%	KW	FALSE	
	MW-33	94%	PL	FALSE	
	MW-34	94%	PL	FALSE	
	MW-35	59%	KW	FALSE	
	MW-35A	39%	KW	FALSE	
	MW-32	89%	KW	FALSE	
Cobalt	MW-34	33%	KW	TRUE	
	MW-35	65%	KW	FALSE	
	MW-32	72%	KW	FALSE	
Copper	MW-33	83%	KW	FALSE	
	MW-33A	39%	KW	FALSE	
	MW-34	72%	KW	FALSE	
	MW-35	88%	KW	FALSE	
	MW-35A	78%	KW	FALSE	
	MW-32	50%	KW	FALSE	
Lead	MW-33	94%	PL	FALSE	
	MW-33A	94%	PL	FALSE	
	MW-34	94%	PL	FALSE	
	MW-35	88%	KW	FALSE	
	MW-32	72%	KW	FALSE	
Nickel	MW-33	94%	PL	FALSE	
	MW-34	67%	KW	FALSE	
	MW-35	82%	KW	FALSE	
	MW-32	72%	KW	FALSE	

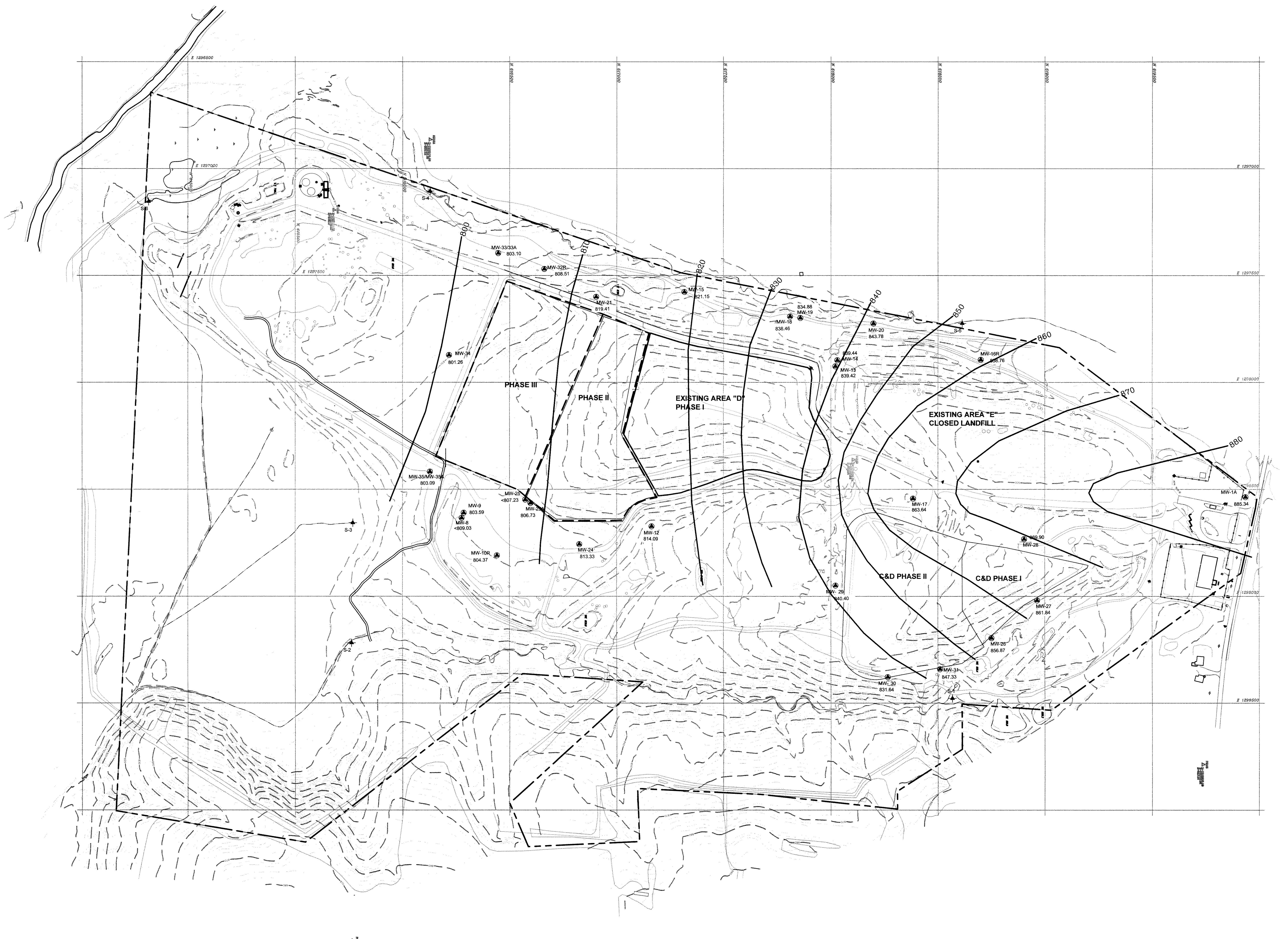
Table 11
October 2012 Statistical Analysis for Phase 3
Lincoln County Landfill
S&ME Project No. 1356-07-004

Parameter	Well ID	Percent Non-Detect	Statistical Analysis Method	SSI	Comments
Selenium	MW-35A	94%	PL	FALSE	
	MW-32	89%	KW	FALSE	
	MW-33	89%	KW	FALSE	
	MW-35A	94%	PL	FALSE	
Silver	MW-32	94%	PL	FALSE	
	MW-33	94%	PL	FALSE	
	MW-33A	94%	PL	FALSE	
Thallium	MW-32	78%	KW	FALSE	
	MW-33	94%	PL	FALSE	
	MW-34	44%	KW	TRUE	
	MW-35	82%	KW	FALSE	
Vanadium	MW-32	33%	KW	FALSE	
	MW-33	89%	KW	FALSE	
	MW-33A	83%	KW	FALSE	
	MW-34	67%	KW	FALSE	
	MW-35	47%	KW	FALSE	
	MW-35A	33%	KW	FALSE	
Zinc	MW-32	39%	KW	FALSE	
	MW-33	39%	KW	FALSE	
	MW-33A	33%	KW	FALSE	
	MW-34	28%	KW	FALSE	
	MW-35	29%	KW	FALSE	
	MW-35A	44%	KW	FALSE	

FIGURES



GROUNDWATER SURFACE
OCTOBER 8-9, 2012

LINCOLN COUNTY LANDFILL
CROUSE, NORTH CAROLINA

LEGEND	
MW-1A	EXISTING MONITORING WELL
S-1	SURFACE WATER SAMPLING LOCATION
CLD	GROUNDWATER SURFACE (108-912)
885.34	GROUNDWATER ELEVATION (ft-msl)
	PROPERTY BOUNDARY
SAME ENGINEERING LICENSE NO. F-0176	
DRAWN BY:	CHECKED BY:
CLD	
DESIGNED BY:	APPROVED BY:
JRP	
PROJECT NUMBER 1356-07-004	
GRAPHIC SCALE	
1" = 200'	11-6-12
0 100 200 400	
(IN FEET)	
1 inch = 200 ft	
DRAWING: 1	OF: 1

APPENDIX I
WELL SAMPLING LOGS AND LABORATORY REPORTS

Surface Water and Leachate Samples
Lincoln County Landfill
S&ME Project 1356-07-004



Location	Date	Time Sampled	Sample Observations
SW-1	10/10/2012	11:20	Clear
SW-2	10/10/2012	9:45	Clear
SW-3	<i>DRY</i>		
SW-4	10/10/2012	13:10	Clear
SW-5	<i>DRY</i>		
SW-6	<i>DRY</i>		
Lift Station	10/10/2012	9:15	(Sampled from Pump #2 Lift Station)

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-1A

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 2.3
Depth to Water (ft) 43.93
Depth to Base of Well (ft) 57.00 (well casing volume = water column*0.174)
Water Column (ft) 13.07
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	10:35	5.10	15.5	29.7
	2.5	10:37	5.28	16.4	17.2
	5.0	10:39	5.30	16.1	15.2
Final	7.0	10:41	5.34	16.5	15.2

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 8:15
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals + Hg, Mn, Fe	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-8

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume _____
Depth to Water (ft) DRY _____
Depth to Base of Well (ft) 31.00 (well casing volume = water column*0.174)
Water Column (ft) _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment _____

	Total Volume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0				
Final					

Well Sampling Data

Sampling Date _____
Sampling Time _____
Sampling Equipment _____
Sample Observations _____

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments WELL DRY
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-9

Sampling Personnel	(1)	Brian Wilson	(2)	Jimmy Addis
Weather Conditions			Cloudy	
Unusual Site Conditions				

Water Level Data

Measuring Point Location	TOC	Well Casing Volume	5.9
Depth to Water (ft)	36.61		
Depth to Base of Well (ft)	70.50	(well casing volume = water column*0.174)	
Water Column (ft)	33.89		
Equipment Used to Measure Depths	Electric Water Level Probe		

Well Purging Data

Date 10.09.12 Purging Equipment Field Cleaned Typhoon Pump

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	10:23	6.10	14.6	19.3
	6.0	10:27	6.48	15.4	20.6
	12.0	10:31	6.52	15.6	21.1
Final	18.0	10:35	6.57	15.6	18.1

Well Sampling Data

Sampling Date	10.10.12
Sampling Time	10:00
Sampling Equipment	disposable teflon bailer
Sample Observations	clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-10R

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.2
Depth to Water (ft) 30.60 _____
Depth to Base of Well (ft) 31.50 (well casing volume = water column*0.174)
Water Column (ft) 0.90 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	11:15	6.45	14.2	Not enough sample
	DRY				
Final					

Well Sampling Data

Sampling Date 10.10.12
Sampling Time _____
Sampling Equipment disposable teflon bailer
Sample Observations **DRY**

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments **WELL DRY AT SAMPLE COLLECTION**
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-12

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.9
Depth to Water (ft) 13.48
Depth to Base of Well (ft) 18.50 (well casing volume = water column*0.174)
Water Column (ft) 5.02
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Field Cleaned Typhoon Pump

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	11:30	5.47	15.7	109.4
	1.0	11:31	5.52	16.0	95.3
	2.0	11:32	5.62	15.5	81.8
Final	3.0	11:33	5.56	15.5	82.5

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 10:40
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-13

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.2
Depth to Water (ft) 33.36
Depth to Base of Well (ft) 40.50 (well casing volume = water column*0.174)
Water Column (ft) 7.14
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	11:31	6.03	16.2	211.6
	1.3	11:33	6.06	16.4	116.4
	2.5	11:35	6.14	16.3	133.9
Final	3.8	11:37	6.26	16.4	110.2

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 8:45
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-14

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 7.7
Depth to Water (ft) 31.80 _____
Depth to Base of Well (ft) 76.00 (well casing volume = water column*0.174)
Water Column (ft) 44.20 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	11:29	6.28	15.7	48.5
	8.0	11:33	6.61	16.1	47.8
	16.0	11:39	6.46	16.4	39.5
Final	24.0	11:45	6.27	16.6	38.2

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 8:40
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-15

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.4
Depth to Water (ft) 28.45
Depth to Base of Well (ft) 30.50 (well casing volume = water column*0.174)
Water Column (ft) 2.05
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	13:53	5.33	14.5	28.4
	0.5	13:54	5.36	14.7	26.9
	1.0	13:55	5.36	14.8	28.8
Final	1.5	13:56	5.42	14.8	29.2

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 9:05
Sampling Equipment disposable teflon bailer
Sample Observations slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-16R

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.7
Depth to Water (ft) 17.63 _____
Depth to Base of Well (ft) 21.60 (well casing volume = water column*0.174)
Water Column (ft) 3.97 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	10:50	6.02	16.1	69.7
	1.0	10:51	6.24	16.5	308.2
	2.0	10:52	6.26	17.0	572.0
Final	3.0	10:53	6.45	16.5	211.8

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 8:25
Sampling Equipment disposable teflon bailer
Sample Observations slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-17

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.1
Depth to Water (ft) 36.00 _____
Depth to Base of Well (ft) 36.50 (well casing volume = water column*0.174)
Water Column (ft) 0.50 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0				
	DRY				
Final					

Well Sampling Data

Sampling Date _____
Sampling Time _____
Sampling Equipment disposable teflon bailer
Sample Observations _____

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments **WELL DRY**
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-18

Sampling Personnel	(1)	Courtney Murphy	(2)	Brian Wilson
Weather Conditions			cloudy	
Unusual Site Conditions				

Water Level Data

Measuring Point Location	TOC	Well Casing Volume	1.6
Depth to Water (ft)	22.95		
Depth to Base of Well (ft)	32.00	(well casing volume = water column*0.174)	
Water Column (ft)	9.05		
Equipment Used to Measure Depths	Electric Water Level Probe		

Well Purging Data

Date	10.08.12	Purging Equipment	Disposable Teflon Bailer
<hr/>			
Initial	Total Volume (Gal)	Time	pH
	0	13:27	6.20
	1.5	13:29	5.98
	<i>Dry at 1.5 gal</i>		
Final			

Well Sampling Data

Sampling Date	10.09.12
Sampling Time	8:55
Sampling Equipment	disposable teflon bailer
Sample Observations	slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-19

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 7.7
Depth to Water (ft) 27.52 _____
Depth to Base of Well (ft) 72.00 (well casing volume = water column*0.174)
Water Column (ft) 44.48 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	13:25	6.35	14.8	125.1
	8.0	13:30	6.14	15.3	89.4
	16.0	13:35	6.13	15.2	105.6
Final	24.0	13:40	6.21	15.2	87.2

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 8:50
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-20

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.9
Depth to Water (ft) 16.22
Depth to Base of Well (ft) 27.00 (well casing volume = water column*0.174)
Water Column (ft) 10.78
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	11:06	6.45	15.8	52.6
	2.0	11:08	5.69	15.9	80.3
	4.0	11:10	5.69	15.8	38.4
Final	6.0	11:12	5.54	15.8	50.8

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 8:32
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-21

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.6
Depth to Water (ft) 40.53
Depth to Base of Well (ft) 44.11 (well casing volume = water column*0.174)
Water Column (ft) 3.58
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	14:09	5.51	14.8	45.3
	0.6	14:10	5.58	15.1	65.9
	1.2	14:11	5.51	15.2	63.4
Final	1.8	14:12	5.58	15.0	50.2

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 9:15
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-24

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.7
Depth to Water (ft) 27.80 _____
Depth to Base of Well (ft) 31.60 (well casing volume = water column*0.174)
Water Column (ft) 3.80 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	11:20	5.73	15.3	67.8
	1.0	11:21	5.38	15.4	64.4
	2.0	11:22	5.42	15.4	49.4
Final	3.0	11:23	5.42	15.3	54.6

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 10:30
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-25

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume _____
Depth to Water (ft) DRY _____
Depth to Base of Well (ft) 31.50 (well casing volume = water column*0.174)
Water Column (ft) _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date _____ Purging Equipment _____ Disposable Teflon Bailer _____

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0				
Final					

Well Sampling Data

Sampling Date _____
Sampling Time _____
Sampling Equipment disposable teflon bailer
Sample Observations _____

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments WELL DRY
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-25A

Sampling Personnel	(1)	Brian Wilson	(2)	Jimmy Addis
Weather Conditions			cloudy	
Unusual Site Conditions				

Water Level Data

Measuring Point Location	TOC	Well Casing Volume	4.9
Depth to Water (ft)	32.11		
Depth to Base of Well (ft)	60.00	(well casing volume = water column*0.174)	
Water Column (ft)	27.89		
Equipment Used to Measure Depths	Electric Water Level Probe		

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	10:55	6.34	15.9	16.9
	5.0	10:59	6.49	16.8	19.4
	10.0	11:03	6.56	16.7	19.2
Final	15.0	11:07	6.63	16.9	18.9

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 10:15
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottle	HNO3

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-26

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.5
Depth to Water (ft) 14.32 _____
Depth to Base of Well (ft) 23.00 (well casing volume = water column*0.174)
Water Column (ft) 8.68 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Volume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	12:34	5.64	16.6	72.5
	1.5	12:36	5.81	16.8	67.9
	3.0	12:38	5.77	16.8	40.6
Final	4.5	12:40	5.79	16.8	58.8

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 11:30
Sampling Equipment disposable teflon bailer
Sample Observations slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs & THF	(3) 40 mL glass vials	HCL
Appendix I Metals + Hg, Mn, Fe	(1) 250 mL plastic bottle	HNO3
Chloride/Sulfate	(1) 250 mL plastic bottle	None

Comments _____

Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-27

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.4
Depth to Water (ft) 19.06 _____
Depth to Base of Well (ft) 27.00 (well casing volume = water column*0.174)
Water Column (ft) 7.94 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Volume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	12:46	5.30	15.8	150.1
	1.5	12:47	5.21	16.1	146.6
	3.0	12:48	5.17	16.0	128.5
Final	4.5	12:49	5.13	15.7	151.3

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 11:40
Sampling Equipment disposable teflon bailer
Sample Observations slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs & THF	(3) 40 mL glass vials	HCL
Appendix I Metals + Hg, Mn, Fe	(1) 250 mL plastic bottle	HNO3
Chloride/Sulfate	(1) 250 mL plastic bottle	None

Comments _____

Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-28

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.5
Depth to Water (ft) 45.78
Depth to Base of Well (ft) 54.50 (well casing volume = water column*0.174)
Water Column (ft) 8.72
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Volume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	13:18	5.10	17.0	39.3
	1.5	13:20	5.04	16.9	29.3
	3.0	13:22	5.00	16.9	29.3
Final	4.5	13:25	4.95	16.8	26.6

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 11:50
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs & THF	(3) 40 mL glass vials	HCL
Appendix I Metals + Hg, Mn, Fe	(1) 250 mL plastic bottle	HNO3
Chloride/Sulfate	(1) 250 mL plastic bottle	None

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-29

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 0.9
Depth to Water (ft) 39.57 _____
Depth to Base of Well (ft) 45.00 (well casing volume = water column*0.174)
Water Column (ft) 5.43 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Volume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	11:51	5.37	15.9	66.5
	0.9	11:52	5.50	16.1	81.7
	1.9	11:53	5.56	16.1	82.4
Final	2.8	11:54	5.56	16.2	90.6

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 10:50
Sampling Equipment disposable teflon bailer
Sample Observations slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs & THF	(3) 40 mL glass vials	HCL
Appendix I Metals + Hg, Mn, Fe	(1) 250 mL plastic bottle	HNO3
Chloride/Sulfate	(1) 250 mL plastic bottle	None

Comments _____

Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-30

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.6
Depth to Water (ft) 54.71 _____
Depth to Base of Well (ft) 64.00 (well casing volume = water column*0.174)
Water Column (ft) 9.29 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Volume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	12:04	5.78	15.4	30.9
	1.5	12:06	5.74	15.4	22.0
	3.0	12:08	5.78	15.5	25.7
Final	4.5	12:10	5.98	15.5	33.2

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 11:00
Sampling Equipment disposable teflon bailer
Sample Observations slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs & THF	(3) 40 mL glass vials	HCL
Appendix I Metals + Hg, Mn, Fe	(1) 250 mL plastic bottle	HNO3
Chloride/Sulfate	(1) 250 mL plastic bottle	None

Comments _____

Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-31

Sampling Personnel (1) Brian Wilson (2) Jimmy Addis
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.3
Depth to Water (ft) 32.55 _____
Depth to Base of Well (ft) 40.00 (well casing volume = water column*0.174)
Water Column (ft) 7.45 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.09.12 Purging Equipment Disposable Teflon Bailer

	Total Volume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	12:20	5.98	15.3	35.8
	1.5	12:22	5.55	15.5	37.2
	3.0	12:24	5.48	15.5	34.9
Final	4.5	12:26	5.65	15.5	32.9

Well Sampling Data

Sampling Date 10.10.12
Sampling Time 11:10
Sampling Equipment disposable teflon bailer
Sample Observations slightly turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs & THF	(3) 40 mL glass vials	HCL
Appendix I Metals + Hg, Mn, Fe	(1) 250 mL plastic bottle	HNO3
Chloride/Sulfate	(1) 250 mL plastic bottle	None

Comments _____

Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-32R

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.6
Depth to Water (ft) 18.74
Depth to Base of Well (ft) 28.05 (well casing volume = water column*0.174)
Water Column (ft) 9.31
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	14:38	5.65	15.0	58.1
	1.5	14:40	5.78	15.3	58.3
	3.0	14:42	5.78	15.5	65.4
Final	4.5	14:44	5.85	15.2	66.1

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 9:20
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottles	HNO3

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-33

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 1.6
Depth to Water (ft) 16.28
Depth to Base of Well (ft) 25.30 (well casing volume = water column*0.174)
Water Column (ft) 9.02
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	14:56	5.66	15.9	87.7
	1.5	14:58	5.57	16.4	84.1
	2.0	14:59	5.69	16.3	48.4
Final	Dry at 2 gal				

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 9:25
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottles	HNO3

Comments _____
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-33A

Sampling Personnel	(1)	Courtney Murphy	(2)	Brian Wilson
Weather Conditions			cloudy	
Unusual Site Conditions				

Water Level Data

Measuring Point Location	TOC	Well Casing Volume	8.4
Depth to Water (ft)	16.22		
Depth to Base of Well (ft)	64.55	(well casing volume = water column*0.174)	
Water Column (ft)	48.33		
Equipment Used to Measure Depths	Electric Water Level Probe		

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	14:55	6.34	14.5	199.4
	8.5	15:00	6.65	15.3	127.3
	17.0	15:05	7.13	14.9	104.9
Final	25.5	15:10	7.22	15.3	118.7

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 9:30
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottles	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-34

Sampling Personnel	(1)	Courtney Murphy	(2)	Brian Wilson
Weather Conditions				
Unusual Site Conditions				

Water Level Data

Measuring Point Location	TOC	Well Casing Volume	0.7
Depth to Water (ft)	31.51		
Depth to Base of Well (ft)	35.27	(well casing volume = water column*0.174)	
Water Column (ft)	3.76		
Equipment Used to Measure Depths	Electric Water Level Probe		

Well Purging Data

Date	10.08.12	Purging Equipment	Disposable Teflon Bailer
<hr/>			
Initial	Total Volume (Gal)	Time	pH
	0	15:22	5.56
	1.0	15:23	5.16
	<i>Dry at 1 gal</i>		
Final			

Well Sampling Data

Sampling Date	10.09.12
Sampling Time	9:35
Sampling Equipment	disposable teflon bailer
Sample Observations	clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottles	HNO3

Comments _____
Lab ENCO _____

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-35

Sampling Personnel	(1)	Courtney Murphy	(2)	Brian Wilson
Weather Conditions				
Unusual Site Conditions				

Water Level Data

Measuring Point Location	TOC	Well Casing Volume	0.1
Depth to Water (ft)	36.55		
Depth to Base of Well (ft)	37.25	(well casing volume = water column*0.174)	
Water Column (ft)	0.70		
Equipment Used to Measure Depths	Electric Water Level Probe		

Well Purging Data

Date 10.08.12 Purging Equipment Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	15:35	4.93	13.7	not enough sample
	<i>Dry at 0.25 gal</i>				
Final					

Well Sampling Data

Sampling Date	10.09.12
Sampling Time	9:45
Sampling Equipment	disposable teflon bailer
Sample Observations	very turbid

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottles	HNO3

Comments *Not enough sample volume available to collect for metals analysis.*
Lab ENCO

Project Name: Lincoln County Landfill
Project Location: Crouse, North Carolina
Project Number: 1356-07-004



Well ID MW-35A

Sampling Personnel (1) Courtney Murphy (2) Brian Wilson
Weather Conditions _____
Unusual Site Conditions _____

Water Level Data

Measuring Point Location TOC Well Casing Volume 5.7
Depth to Water (ft) 37.10 _____
Depth to Base of Well (ft) 69.69 (well casing volume = water column*0.174)
Water Column (ft) 32.59 _____
Equipment Used to Measure Depths Electric Water Level Probe

Well Purging Data

Date 10.08.12 Purging Equipment _____ Disposable Teflon Bailer

	Total Voume (Gal)	Time	pH	Temp (C)	Conductance (μ S)
Initial	0	15:35	6.25	14.3	33.7
	6.0	15:40	6.08	14.8	26.2
	12.0	15:45	6.63	15.1	25.9
Final	18.0	15:50	6.83	15.1	36.0

Well Sampling Data

Sampling Date 10.09.12
Sampling Time 9:48
Sampling Equipment disposable teflon bailer
Sample Observations clear

Analytical Data

Method	Container Type and No.	Preservation
Appendix I VOCs	(3) 40 mL glass vials	HCL
Appendix I Metals	(1) 500 mL plastic bottles	HNO3

Comments _____
Lab ENCO

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



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Thursday, October 25, 2012

S&ME, Inc. (SM002)

Attn: Courtney Murphy

9751 Southern Pine Blvd.

Charlotte, NC 28273

RE: Laboratory Results for

Project Number: 1356-07-004, Project Name/Desc: Lincoln County LF - App Is

ENCO Workorder(s): C210455

Dear Courtney Murphy,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, October 11, 2012.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith".

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: 5503-MW1A		Lab ID: C210455-01	Sampled: 10/09/12 08:15	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12	11:11	10/17/2012 10:52
EPA 6020A	04/07/13	10/12/12	11:14	10/15/2012 13:11
EPA 7470A	11/06/12	10/15/12	10:58	10/15/2012 18:18
EPA 8260B	10/23/12	10/18/12	08:56	10/19/2012 02:08

Client ID: 5503-MW9		Lab ID: C210455-02	Sampled: 10/10/12 10:00	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/08/13	10/12/12	11:11	10/17/2012 11:02
EPA 6020A	04/08/13	10/12/12	11:14	10/15/2012 12:43
EPA 8260B	10/24/12	10/18/12	08:56	10/19/2012 02:37

Client ID: 5503-MW12		Lab ID: C210455-03	Sampled: 10/10/12 10:40	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/08/13	10/12/12	11:11	10/17/2012 11:05
EPA 6020A	04/08/13	10/12/12	11:14	10/15/2012 13:15
EPA 8260B	10/24/12	10/18/12	08:56	10/19/2012 03:07

Client ID: 5503-MW13		Lab ID: C210455-04	Sampled: 10/09/12 08:45	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12	11:11	10/17/2012 11:07
EPA 6020A	04/07/13	10/12/12	11:14	10/15/2012 13:19
EPA 8260B	10/23/12	10/18/12	08:56	10/19/2012 03:36

Client ID: 5503-MW14		Lab ID: C210455-05	Sampled: 10/09/12 08:40	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12	11:11	10/17/2012 11:16
EPA 6020A	04/07/13	10/12/12	11:14	10/15/2012 13:23
EPA 8260B	10/23/12	10/18/12	06:31	10/18/2012 10:36

Client ID: 5503-MW15		Lab ID: C210455-06	Sampled: 10/09/12 09:05	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12	11:11	10/17/2012 11:19
EPA 6020A	04/07/13	10/12/12	11:14	10/15/2012 13:27
EPA 8260B	10/23/12	10/18/12	06:31	10/18/2012 11:05



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Client ID:	5503-MW16R	Lab ID:	C210455-07	Sampled:	10/09/12 08:25	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/07/13		10/12/12	11:11	10/17/2012	11:21
EPA 6020A		04/07/13		10/12/12	11:14	10/15/2012	13:31
EPA 8260B		10/23/12		10/18/12	06:31	10/18/2012	11:34

Client ID:	5503-MW18	Lab ID:	C210455-08	Sampled:	10/09/12 08:55	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/07/13		10/12/12	11:11	10/17/2012	11:23
EPA 6020A		04/07/13		10/12/12	11:14	10/15/2012	13:35
EPA 8260B		10/23/12		10/18/12	06:31	10/18/2012	12:04

Client ID:	5503-MW19	Lab ID:	C210455-09	Sampled:	10/09/12 08:50	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/07/13		10/12/12	11:11	10/17/2012	11:29
EPA 6020A		04/07/13		10/12/12	11:14	10/15/2012	13:39
EPA 8260B		10/23/12		10/18/12	06:31	10/18/2012	12:33

Client ID:	5503-MW20	Lab ID:	C210455-10	Sampled:	10/09/12 08:32	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/07/13		10/12/12	11:11	10/17/2012	11:31
EPA 6020A		04/07/13		10/12/12	11:14	10/15/2012	13:52
EPA 8260B		10/23/12		10/18/12	06:31	10/18/2012	13:03

Client ID:	5503-MW21	Lab ID:	C210455-11	Sampled:	10/09/12 09:15	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/07/13		10/12/12	11:11	10/17/2012	11:33
EPA 6020A		04/07/13		10/12/12	11:14	10/15/2012	13:56
EPA 8260B		10/23/12		10/18/12	06:31	10/18/2012	13:32

Client ID:	5503-MW24	Lab ID:	C210455-12	Sampled:	10/10/12 10:30	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/08/13		10/12/12	11:11	10/17/2012	11:35
EPA 6020A		04/08/13		10/12/12	11:14	10/15/2012	14:00
EPA 8260B		10/24/12		10/18/12	06:31	10/18/2012	14:01

Client ID:	5503-MW25A	Lab ID:	C210455-13	Sampled:	10/10/12 10:15	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/08/13		10/12/12	11:11	10/17/2012	11:38
EPA 6020A		04/08/13		10/12/12	11:14	10/15/2012	14:04
EPA 8260B		10/24/12		10/18/12	06:31	10/18/2012	14:31

Client ID: 5503-MW32R		Lab ID: C210455-14	Sampled: 10/09/12 09:20	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12 11:11	10/17/2012 11:40	
EPA 6020A	04/07/13	10/12/12 11:14	10/15/2012 14:08	
EPA 8260B	10/23/12	10/18/12 06:31	10/18/2012 15:01	

Client ID: 5503-MW33		Lab ID: C210455-15	Sampled: 10/09/12 09:25	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12 11:11	10/17/2012 11:51	
EPA 6020A	04/07/13	10/12/12 11:14	10/15/2012 14:12	
EPA 8260B	10/23/12	10/18/12 06:31	10/18/2012 15:30	

Client ID: 5503-MW33A		Lab ID: C210455-16	Sampled: 10/09/12 09:30	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12 11:11	10/17/2012 11:53	
EPA 6020A	04/07/13	10/12/12 11:14	10/15/2012 14:16	
EPA 8260B	10/23/12	10/18/12 06:31	10/18/2012 16:00	

Client ID: 5503-MW34		Lab ID: C210455-17	Sampled: 10/09/12 09:35	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12 11:11	10/17/2012 11:55	
EPA 6020A	04/07/13	10/12/12 11:14	10/15/2012 14:20	
EPA 8260B	10/23/12	10/18/12 06:31	10/18/2012 16:30	

Client ID: 5503-MW35		Lab ID: C210455-19	Sampled: 10/09/12 09:45	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 8260B	10/23/12	10/18/12 06:31	10/18/2012 16:59	

Client ID: 5503-MW35A		Lab ID: C210455-20	Sampled: 10/09/12 09:48	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 6010C	04/07/13	10/12/12 11:11	10/17/2012 11:58	
EPA 6020A	04/07/13	10/12/12 11:14	10/15/2012 14:24	
EPA 8260B	10/23/12	10/18/12 06:31	10/18/2012 17:28	

Client ID: 5503-Trip Blank		Lab ID: C210455-21	Sampled: 10/09/12 08:15	Received: 10/11/12 09:02
Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)	
EPA 8260B	10/23/12	10/18/12 06:31	10/18/2012 17:58	

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 5503-MW1A		Lab ID: C210455-01								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total		1.17	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total		28.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloroform		22		1	0.18	1.0	5	ug/L	EPA 8260B	
Chromium - Total		3.79	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total		2.56	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total		660		1	22.0	50.0	300	ug/L	EPA 6010C	
Lead - Total		2.33	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Manganese - Total		17.2	J	1	1.10	10.0	50	ug/L	EPA 6010C	
Nickel - Total		2.79	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Zinc - Total		14.9		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW9		Lab ID: C210455-02								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total		0.997	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total		29.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total		2.67	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Vanadium - Total		1.57	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total		4.42	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW12		Lab ID: C210455-03								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total		175		1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total		0.122	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Cobalt - Total		17.3		1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total		1.96	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total		6.02	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Thallium - Total		0.136	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Zinc - Total		38.2		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW13		Lab ID: C210455-04								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane		17		1	0.13	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene		2.9		1	0.19	1.0	1	ug/L	EPA 8260B	
Arsenic - Total		8.09	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total		87.6	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene		4.8		1	0.15	1.0	1	ug/L	EPA 8260B	
Chlorobenzene		0.44	J	1	0.17	1.0	3	ug/L	EPA 8260B	
Chloroethane		2.2	J	1	0.23	1.0	10	ug/L	EPA 8260B	
Chromium - Total		2.17	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene		2.5	J	1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total		239		1	1.10	10.0	10	ug/L	EPA 6010C	
Methylene chloride		0.96	J	1	0.23	1.0	1	ug/L	EPA 8260B	
Nickel - Total		16.2	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Tetrachloroethene		3.7		1	0.17	1.0	1	ug/L	EPA 8260B	
Thallium - Total		0.983	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Trichloroethene		2.4		1	0.15	1.0	1	ug/L	EPA 8260B	
Vinyl chloride		0.98	J	1	0.32	1.0	1	ug/L	EPA 8260B	
Xylenes (Total)		1.7	J	1	0.45	3.0	5	ug/L	EPA 8260B	
Zinc - Total		10.4		1	3.80	10.0	10	ug/L	EPA 6010C	



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Client ID:	5503-MW14	Lab ID: C210455-05								
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	2.0	J	1	0.13	1.0	5	ug/L	EPA 8260B	
Antimony - Total	4.65	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Arsenic - Total	4.75	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	24.9	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Copper - Total	5.50	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	2.39	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Tetrachloroethene	0.64	J	1	0.17	1.0	1	ug/L	EPA 8260B	
Zinc - Total	25.5		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID:	5503-MW15	Lab ID: C210455-06								
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	4.92	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	77.2	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	0.308	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Zinc - Total	5.76	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID:	5503-MW16R	Lab ID: C210455-07								
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane	3.8	J	1	0.13	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene	3.4		1	0.19	1.0	1	ug/L	EPA 8260B	
Arsenic - Total	9.46	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	397		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	5.8		1	0.15	1.0	1	ug/L	EPA 8260B	
Beryllium - Total	0.137	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Cadmium - Total	0.387	J	1	0.360	1.00	1	ug/L	EPA 6010C	
Chlorobenzene	3.4		1	0.17	1.0	3	ug/L	EPA 8260B	
Chromium - Total	9.93	J	1	1.00	10.0	10	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	11		1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total	69.4		1	1.10	10.0	10	ug/L	EPA 6010C	
Ethylbenzene	0.46	J	1	0.13	1.0	1	ug/L	EPA 8260B	
Lead - Total	7.58	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	41.8	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Silver - Total	4.41	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Thallium - Total	6.66		1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vinyl chloride	2.9		1	0.32	1.0	1	ug/L	EPA 8260B	
Xylenes (Total)	0.93	J	1	0.45	3.0	5	ug/L	EPA 8260B	
Zinc - Total	48.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID:	5503-MW18	Lab ID: C210455-08								
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	57.9	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total	1.04	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	4.92	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total	2.51	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Thallium - Total	0.176	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total	2.04	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	8.45	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID:	5503-MW19	Lab ID: C210455-09								
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
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Client ID: 5503-MW19		Lab ID: C210455-09								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane		10		1	0.13	1.0	5	ug/L	EPA 8260B	
1,4-Dichlorobenzene		0.44	J	1	0.19	1.0	1	ug/L	EPA 8260B	
Antimony - Total		0.571	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total		29.9	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene		1.4		1	0.15	1.0	1	ug/L	EPA 8260B	
cis-1,2-Dichloroethene		0.90	J	1	0.15	1.0	5	ug/L	EPA 8260B	
Lead - Total		2.17	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Methylene chloride		6.0		1	0.23	1.0	1	ug/L	EPA 8260B	
Tetrachloroethene		2.2		1	0.17	1.0	1	ug/L	EPA 8260B	
Trichloroethene		1.5		1	0.15	1.0	1	ug/L	EPA 8260B	
Trichlorofluoromethane		0.61	J	1	0.24	1.0	1	ug/L	EPA 8260B	
Xylenes (Total)		1.6	J	1	0.45	3.0	5	ug/L	EPA 8260B	
Zinc - Total		9.48	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW20		Lab ID: C210455-10								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
1,1-Dichloroethane		10		1	0.13	1.0	5	ug/L	EPA 8260B	
Barium - Total		67.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene		1.3		1	0.15	1.0	1	ug/L	EPA 8260B	
Beryllium - Total		0.104	J	1	0.100	1.00	1	ug/L	EPA 6010C	
cis-1,2-Dichloroethene		2.5	J	1	0.15	1.0	5	ug/L	EPA 8260B	
Cobalt - Total		2.91	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Methylene chloride		2.9		1	0.23	1.0	1	ug/L	EPA 8260B	
Nickel - Total		2.08	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Tetrachloroethene		0.78	J	1	0.17	1.0	1	ug/L	EPA 8260B	
Trichloroethene		1.1		1	0.15	1.0	1	ug/L	EPA 8260B	
Xylenes (Total)		1.3	J	1	0.45	3.0	5	ug/L	EPA 8260B	
Zinc - Total		7.67	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW21		Lab ID: C210455-11								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total		43.5	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total		0.138	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chromium - Total		1.20	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Vanadium - Total		1.89	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total		5.50	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW24		Lab ID: C210455-12								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total		4.30	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total		116		1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total		0.716	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Copper - Total		3.62	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Zinc - Total		18.6		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW25A		Lab ID: C210455-13								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total		3.87	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total		51.0	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total		7.47	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total		11.0		1	1.10	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW25A		Lab ID: C210455-13								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Lead - Total		4.90	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Vanadium - Total		4.14	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total		15.3		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW32R		Lab ID: C210455-14								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total		10.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Zinc - Total		5.50	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW33		Lab ID: C210455-15								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total		46.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total		0.181	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Zinc - Total		7.22	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW33A		Lab ID: C210455-16								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total		2.10	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total		6.02	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Copper - Total		2.00	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Lead - Total		4.61	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Zinc - Total		19.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW34		Lab ID: C210455-17								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total		202		1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total		1.18		1	0.100	1.00	1	ug/L	EPA 6010C	
Cobalt - Total		4.30	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Copper - Total		3.38	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Nickel - Total		2.84	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Thallium - Total		0.203	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Vanadium - Total		4.29	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total		19.7		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW35A		Lab ID: C210455-20								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total		0.640	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total		43.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chromium - Total		3.07	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Vanadium - Total		3.43	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total		9.62	J	1	3.80	10.0	10	ug/L	EPA 6010C	

ANALYTICAL RESULTS

Description: 5503-MW1A

Lab Sample ID: C210455-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 02:08	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 02:08	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 02:08	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 02:08	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 02:08	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 02:08	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 02:08	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 02:08	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 02:08	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 02:08	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 02:08	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 02:08	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 02:08	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 02:08	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 02:08	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 02:08	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 02:08	JKG	
Chloroform [67-66-3] ^	22		ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 02:08	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 02:08	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 02:08	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 02:08	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 02:08	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 02:08	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 02:08	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 02:08	JKG	

Description: 5503-MW1A

Lab Sample ID: C210455-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 02:08	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 02:08	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 02:08	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	91 %	51-122		ZJ18005	EPA 8260B	10/19/12 02:08	JKG	
Dibromofluoromethane	53	1	50.0	106 %	68-117		ZJ18005	EPA 8260B	10/19/12 02:08	JKG	
Toluene-d8	45	1	50.0	90 %	67-127		ZJ18005	EPA 8260B	10/19/12 02:08	JKG	

Description: 5503-MW1A

Lab Sample ID: C210455-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:18	T1D	

Description: 5503-MW1A

Lab Sample ID: C210455-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	1.17	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:11	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 10:52	JDH	
Barium [7440-39-3] ^	28.7	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 10:52	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 10:52	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 10:52	JDH	
Chromium [7440-47-3] ^	3.79	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 10:52	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 10:52	JDH	
Copper [7440-50-8] ^	2.56	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 10:52	JDH	
Iron [7439-89-6] ^	660		ug/L	1	22.0	50.0	300	EPA 6010C	10/17/12 10:52	JDH	
Lead [7439-92-1] ^	2.33	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 10:52	JDH	
Manganese [7439-96-5] ^	17.2	J	ug/L	1	1.10	10.0	50	EPA 6010C	10/17/12 10:52	JDH	
Nickel [7440-02-0] ^	2.79	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 10:52	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:11	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 10:52	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:11	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 10:52	JDH	
Zinc [7440-66-6] ^	14.9		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 10:52	JDH	

Description: 5503-MW9

Lab Sample ID: C210455-02

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:00

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 02:37	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 02:37	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 02:37	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 02:37	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 02:37	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 02:37	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 02:37	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 02:37	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 02:37	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 02:37	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 02:37	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 02:37	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 02:37	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 02:37	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 02:37	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 02:37	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 02:37	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 02:37	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 02:37	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 02:37	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 02:37	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 02:37	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 02:37	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 02:37	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 02:37	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 02:37	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 02:37	JKG	

Description: 5503-MW9

Lab Sample ID: C210455-02

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:00

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 02:37	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122		2J18005	EPA 8260B	10/19/12 02:37	JKG	
Dibromofluoromethane	54	1	50.0	108 %	68-117		2J18005	EPA 8260B	10/19/12 02:37	JKG	
Toluene-d8	45	1	50.0	90 %	67-127		2J18005	EPA 8260B	10/19/12 02:37	JKG	

Description: 5503-MW9

Lab Sample ID: C210455-02

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:00

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.997	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 12:43	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:02	JDH	
Barium [7440-39-3] ^	29.3	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:02	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:02	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:02	JDH	
Chromium [7440-47-3] ^	2.67	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:02	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:02	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:02	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:02	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:02	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 12:43	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:02	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 12:43	VLO	
Vanadium [7440-62-2] ^	1.57	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:02	JDH	
Zinc [7440-66-6] ^	4.42	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:02	JDH	

Description: 5503-MW12

Lab Sample ID: C210455-03

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:40

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 03:07	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 03:07	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 03:07	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 03:07	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 03:07	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 03:07	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 03:07	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 03:07	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 03:07	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 03:07	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 03:07	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 03:07	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 03:07	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 03:07	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 03:07	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 03:07	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 03:07	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 03:07	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 03:07	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 03:07	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 03:07	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 03:07	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 03:07	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 03:07	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 03:07	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 03:07	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 03:07	JKG	

Description: 5503-MW12

Lab Sample ID: C210455-03

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:40

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 03:07	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	47	1	50.0	95 %	51-122		2J18005	EPA 8260B	10/19/12 03:07	JKG	
Dibromofluoromethane	54	1	50.0	107 %	68-117		2J18005	EPA 8260B	10/19/12 03:07	JKG	
Toluene-d8	47	1	50.0	93 %	67-127		2J18005	EPA 8260B	10/19/12 03:07	JKG	

Description: 5503-MW12

Lab Sample ID: C210455-03

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:40

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:15	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:05	JDH	
Barium [7440-39-3] ^	175		ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:05	JDH	
Beryllium [7440-41-7] ^	0.122	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:05	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:05	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:05	JDH	
Cobalt [7440-48-4] ^	17.3		ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:05	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:05	JDH	
Lead [7439-92-1] ^	1.96	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:05	JDH	
Nickel [7440-02-0] ^	6.02	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:05	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:15	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:05	JDH	
Thallium [7440-28-0] ^	0.136	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:15	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:05	JDH	
Zinc [7440-66-6] ^	38.2		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:05	JDH	

Description: 5503-MW13

Lab Sample ID: C210455-04

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:45

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 03:36	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 03:36	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
1,1-Dichloroethane [75-34-3] ^	17		ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 03:36	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 03:36	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 03:36	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 03:36	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
1,4-Dichlorobenzene [106-46-7] ^	2.9		ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 03:36	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 03:36	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 03:36	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 03:36	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 03:36	JKG	
Benzene [71-43-2] ^	4.8		ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 03:36	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 03:36	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 03:36	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 03:36	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Chlorobenzene [108-90-7] ^	0.44	J	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 03:36	JKG	
Chloroethane [75-00-3] ^	2.2	J	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 03:36	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 03:36	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	2.5	J	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 03:36	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 03:36	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 03:36	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 03:36	JKG	
Methylene chloride [75-09-2] ^	0.96	J	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Tetrachloroethene [127-18-4] ^	3.7		ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 03:36	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 03:36	JKG	
Trichloroethene [79-01-6] ^	2.4		ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 03:36	JKG	
Vinyl chloride [75-01-4] ^	0.98	J	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 03:36	JKG	
Xylenes (Total) [1330-20-7] ^	1.7	J	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 03:36	JKG	

Description: 5503-MW13**Lab Sample ID:** C210455-04**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/09/12 08:45**Work Order:** C210455**Project:** Lincoln County LF - App Is**Sampled By:** Brian E. Wilson**Volatile Organic Compounds by GCMS**

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By		
4-Bromofluorobenzene	46	1	50.0	92 %	51-122	2J18005	EPA 8260B	10/19/12 03:36	JKG		
Dibromofluoromethane	51	1	50.0	102 %	68-117	2J18005	EPA 8260B	10/19/12 03:36	JKG		
Toluene-d8	46	1	50.0	91 %	67-127	2J18005	EPA 8260B	10/19/12 03:36	JKG		

Description: 5503-MW13

Lab Sample ID: C210455-04

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:45

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:19	VLO	
Arsenic [7440-38-2] ^	8.09	J	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:07	JDH	
Barium [7440-39-3] ^	87.6	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:07	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:07	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:07	JDH	
Chromium [7440-47-3] ^	2.17	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:07	JDH	
Cobalt [7440-48-4] ^	239		ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:07	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:07	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:07	JDH	
Nickel [7440-02-0] ^	16.2	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:07	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:19	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:07	JDH	
Thallium [7440-28-0] ^	0.983	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:19	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:07	JDH	
Zinc [7440-66-6] ^	10.4		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:07	JDH	

Description: 5503-MW14

Lab Sample ID: C210455-05

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:40

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 10:36	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 10:36	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
1,1-Dichloroethane [75-34-3] ^	2.0	J	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 10:36	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 10:36	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 10:36	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 10:36	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 10:36	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 10:36	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 10:36	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 10:36	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 10:36	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 10:36	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 10:36	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 10:36	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 10:36	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 10:36	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 10:36	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 10:36	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 10:36	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 10:36	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 10:36	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 10:36	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Tetrachloroethene [127-18-4] ^	0.64	J	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 10:36	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 10:36	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 10:36	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 10:36	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 10:36	JKG	

Description: 5503-MW14

Lab Sample ID: C210455-05

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:40

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 10:36	JKG	
Surrogates											
4-Bromofluorobenzene	51	1	50.0	102 %	51-122		2J18001	EPA 8260B	10/18/12 10:36	JKG	
Dibromofluoromethane	52	1	50.0	105 %	68-117		2J18001	EPA 8260B	10/18/12 10:36	JKG	
Toluene-d8	52	1	50.0	104 %	67-127		2J18001	EPA 8260B	10/18/12 10:36	JKG	

Description: 5503-MW14

Lab Sample ID: C210455-05

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:40

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	4.65	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:23	VLO	
Arsenic [7440-38-2] ^	4.75	J	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:16	JDH	
Barium [7440-39-3] ^	24.9	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:16	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:16	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:16	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:16	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:16	JDH	
Copper [7440-50-8] ^	5.50	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:16	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:16	JDH	
Nickel [7440-02-0] ^	2.39	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:16	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:23	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:16	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:23	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:16	JDH	
Zinc [7440-66-6] ^	25.5		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:16	JDH	

Description: 5503-MW15

Lab Sample ID: C210455-06

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:05

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 11:05	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 11:05	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 11:05	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 11:05	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 11:05	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 11:05	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 11:05	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 11:05	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 11:05	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 11:05	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 11:05	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 11:05	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 11:05	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 11:05	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 11:05	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 11:05	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 11:05	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 11:05	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 11:05	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 11:05	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 11:05	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 11:05	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 11:05	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 11:05	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 11:05	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 11:05	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 11:05	JKG	

Description: 5503-MW15

Lab Sample ID: C210455-06

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:05

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 11:05	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	52	1	50.0	103 %	51-122		2J18001	EPA 8260B	10/18/12 11:05	JKG	
Dibromofluoromethane	52	1	50.0	104 %	68-117		2J18001	EPA 8260B	10/18/12 11:05	JKG	
Toluene-d8	52	1	50.0	103 %	67-127		2J18001	EPA 8260B	10/18/12 11:05	JKG	

Description: 5503-MW15

Lab Sample ID: C210455-06

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:05

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:27	VLO	
Arsenic [7440-38-2] ^	4.92	J	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:19	JDH	
Barium [7440-39-3] ^	77.2	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:19	JDH	
Beryllium [7440-41-7] ^	0.308	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:19	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:19	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:19	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:19	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:19	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:19	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:19	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:27	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:19	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:27	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:19	JDH	
Zinc [7440-66-6] ^	5.76	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:19	JDH	

Description: 5503-MW16R

Lab Sample ID: C210455-07

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:25

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 11:34	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 11:34	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
1,1-Dichloroethane [75-34-3] ^	3.8	J	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 11:34	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 11:34	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 11:34	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 11:34	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
1,4-Dichlorobenzene [106-46-7] ^	3.4		ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 11:34	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 11:34	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 11:34	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 11:34	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 11:34	JKG	
Benzene [71-43-2] ^	5.8		ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 11:34	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 11:34	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 11:34	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 11:34	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Chlorobenzene [108-90-7] ^	3.4		ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 11:34	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 11:34	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 11:34	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	11		ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 11:34	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 11:34	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 11:34	JKG	
Ethylbenzene [100-41-4] ^	0.46	J	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 11:34	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 11:34	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 11:34	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 11:34	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 11:34	JKG	
Vinyl chloride [75-01-4] ^	2.9		ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 11:34	JKG	

Description: 5503-MW16R

Lab Sample ID: C210455-07

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:25

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.93	J	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 11:34	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	52	1	50.0	103 %	51-122	2J18001	EPA 8260B	10/18/12 11:34	JKG		
Dibromofluoromethane	53	1	50.0	106 %	68-117	2J18001	EPA 8260B	10/18/12 11:34	JKG		
Toluene-d8	52	1	50.0	103 %	67-127	2J18001	EPA 8260B	10/18/12 11:34	JKG		

Description: 5503-MW16R

Lab Sample ID: C210455-07

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:25

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:31	VLO	
Arsenic [7440-38-2] ^	9.46	J	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:21	JDH	
Barium [7440-39-3] ^	397		ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:21	JDH	
Beryllium [7440-41-7] ^	0.137	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:21	JDH	
Cadmium [7440-43-9] ^	0.387	J	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:21	JDH	
Chromium [7440-47-3] ^	9.93	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:21	JDH	
Cobalt [7440-48-4] ^	69.4		ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:21	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:21	JDH	
Lead [7439-92-1] ^	7.58	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:21	JDH	
Nickel [7440-02-0] ^	41.8	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:21	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:31	VLO	
Silver [7440-22-4] ^	4.41	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:21	JDH	
Thallium [7440-28-0] ^	6.66		ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:31	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:21	JDH	
Zinc [7440-66-6] ^	48.8		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:21	JDH	

Description: 5503-MW18

Lab Sample ID: C210455-08

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:55

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 12:04	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 12:04	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 12:04	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 12:04	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 12:04	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 12:04	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 12:04	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 12:04	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 12:04	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 12:04	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 12:04	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 12:04	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 12:04	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 12:04	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 12:04	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 12:04	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 12:04	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 12:04	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 12:04	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 12:04	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 12:04	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 12:04	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 12:04	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 12:04	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 12:04	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 12:04	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 12:04	JKG	

Description: 5503-MW18

Lab Sample ID: C210455-08

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:55

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 12:04	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	51	1	50.0	102 %	51-122		2J18001	EPA 8260B	10/18/12 12:04	JKG	
Dibromofluoromethane	54	1	50.0	107 %	68-117		2J18001	EPA 8260B	10/18/12 12:04	JKG	
Toluene-d8	51	1	50.0	102 %	67-127		2J18001	EPA 8260B	10/18/12 12:04	JKG	

Description: 5503-MW18

Lab Sample ID: C210455-08

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:55

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:35	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:23	JDH	
Barium [7440-39-3] ^	57.9	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:23	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:23	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:23	JDH	
Chromium [7440-47-3] ^	1.04	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:23	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:23	JDH	
Copper [7440-50-8] ^	4.92	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:23	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:23	JDH	
Nickel [7440-02-0] ^	2.51	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:23	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:35	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:23	JDH	
Thallium [7440-28-0] ^	0.176	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:35	VLO	
Vanadium [7440-62-2] ^	2.04	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:23	JDH	
Zinc [7440-66-6] ^	8.45	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:23	JDH	

Description: 5503-MW19

Lab Sample ID: C210455-09

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:50

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 12:33	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 12:33	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
1,1-Dichloroethane [75-34-3] ^	10		ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 12:33	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 12:33	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 12:33	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 12:33	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.44	J	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 12:33	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 12:33	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 12:33	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 12:33	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 12:33	JKG	
Benzene [71-43-2] ^	1.4		ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 12:33	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 12:33	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 12:33	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 12:33	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 12:33	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 12:33	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 12:33	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.90	J	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 12:33	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 12:33	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 12:33	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 12:33	JKG	
Methylene chloride [75-09-2] ^	6.0		ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Tetrachloroethene [127-18-4] ^	2.2		ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 12:33	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 12:33	JKG	
Trichloroethene [79-01-6] ^	1.5		ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Trichlorofluoromethane [75-69-4] ^	0.61	J	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 12:33	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 12:33	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 12:33	JKG	

Description: 5503-MW19

Lab Sample ID: C210455-09

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:50

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	1.6	J	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 12:33	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	51	1	50.0	103 %	51-122	ZJ18001	EPA 8260B	10/18/12 12:33	JKG		
Dibromofluoromethane	53	1	50.0	106 %	68-117	ZJ18001	EPA 8260B	10/18/12 12:33	JKG		
Toluene-d8	52	1	50.0	104 %	67-127	ZJ18001	EPA 8260B	10/18/12 12:33	JKG		

Description: 5503-MW19

Lab Sample ID: C210455-09

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:50

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.571	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:39	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:29	JDH	
Barium [7440-39-3] ^	29.9	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:29	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:29	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:29	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:29	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:29	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:29	JDH	
Lead [7439-92-1] ^	2.17	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:29	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:29	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:39	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:29	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:39	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:29	JDH	
Zinc [7440-66-6] ^	9.48	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:29	JDH	

Description: 5503-MW20

Lab Sample ID: C210455-10

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:32

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 13:03	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 13:03	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
1,1-Dichloroethane [75-34-3] ^	10		ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 13:03	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 13:03	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 13:03	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 13:03	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 13:03	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 13:03	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 13:03	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 13:03	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 13:03	JKG	
Benzene [71-43-2] ^	1.3		ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 13:03	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 13:03	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 13:03	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 13:03	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 13:03	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 13:03	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 13:03	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	2.5	J	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 13:03	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 13:03	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 13:03	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 13:03	JKG	
Methylene chloride [75-09-2] ^	2.9		ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Tetrachloroethene [127-18-4] ^	0.78	J	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 13:03	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 13:03	JKG	
Trichloroethene [79-01-6] ^	1.1		ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 13:03	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 13:03	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 13:03	JKG	

Description: 5503-MW20

Lab Sample ID: C210455-10

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:32

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	1.3	J	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 13:03	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	51	1	50.0	101 %	51-122	ZJ18001	EPA 8260B	10/18/12 13:03	JKG		
Dibromofluoromethane	53	1	50.0	106 %	68-117	ZJ18001	EPA 8260B	10/18/12 13:03	JKG		
Toluene-d8	51	1	50.0	102 %	67-127	ZJ18001	EPA 8260B	10/18/12 13:03	JKG		

Description: 5503-MW20

Lab Sample ID: C210455-10

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 08:32

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:52	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:31	JDH	
Barium [7440-39-3] ^	67.5	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:31	JDH	
Beryllium [7440-41-7] ^	0.104	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:31	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:31	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:31	JDH	
Cobalt [7440-48-4] ^	2.91	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:31	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:31	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:31	JDH	
Nickel [7440-02-0] ^	2.08	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:31	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:52	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:31	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:52	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:31	JDH	
Zinc [7440-66-6] ^	7.67	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:31	JDH	

Description: 5503-MW21

Lab Sample ID: C210455-11

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 13:32	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 13:32	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 13:32	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 13:32	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 13:32	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 13:32	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 13:32	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 13:32	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 13:32	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 13:32	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 13:32	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 13:32	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 13:32	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 13:32	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 13:32	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 13:32	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 13:32	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 13:32	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 13:32	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 13:32	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 13:32	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 13:32	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 13:32	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 13:32	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 13:32	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 13:32	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 13:32	JKG	

Description: 5503-MW21

Lab Sample ID: C210455-11

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 13:32	JKG	
Surrogates											
4-Bromofluorobenzene	52	1	50.0	104 %	51-122	2J18001	EPA 8260B	10/18/12 13:32	JKG		
Dibromofluoromethane	53	1	50.0	105 %	68-117	2J18001	EPA 8260B	10/18/12 13:32	JKG		
Toluene-d8	52	1	50.0	103 %	67-127	2J18001	EPA 8260B	10/18/12 13:32	JKG		

Description: 5503-MW21

Lab Sample ID: C210455-11

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 13:56	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:33	JDH	
Barium [7440-39-3] ^	43.5	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:33	JDH	
Beryllium [7440-41-7] ^	0.138	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:33	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:33	JDH	
Chromium [7440-47-3] ^	1.20	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:33	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:33	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:33	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:33	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:33	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 13:56	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:33	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 13:56	VLO	
Vanadium [7440-62-2] ^	1.89	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:33	JDH	
Zinc [7440-66-6] ^	5.50	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:33	JDH	

Description: 5503-MW24

Lab Sample ID: C210455-12

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:30

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 14:01	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 14:01	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 14:01	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 14:01	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 14:01	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 14:01	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 14:01	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 14:01	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 14:01	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 14:01	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 14:01	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 14:01	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 14:01	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 14:01	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 14:01	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 14:01	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 14:01	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 14:01	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 14:01	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 14:01	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 14:01	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 14:01	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 14:01	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 14:01	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 14:01	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 14:01	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 14:01	JKG	

Description: 5503-MW24

Lab Sample ID: C210455-12

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:30

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 14:01	JKG	
Surrogates											
4-Bromofluorobenzene	52	1	50.0	104 %	51-122	2J18001	EPA 8260B	10/18/12 14:01	JKG		
Dibromofluoromethane	53	1	50.0	105 %	68-117	2J18001	EPA 8260B	10/18/12 14:01	JKG		
Toluene-d8	51	1	50.0	103 %	67-127	2J18001	EPA 8260B	10/18/12 14:01	JKG		

Description: 5503-MW24

Lab Sample ID: C210455-12

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:30

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 14:00	VLO	
Arsenic [7440-38-2] ^	4.30	J	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:35	JDH	
Barium [7440-39-3] ^	116		ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:35	JDH	
Beryllium [7440-41-7] ^	0.716	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:35	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:35	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:35	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:35	JDH	
Copper [7440-50-8] ^	3.62	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:35	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:35	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:35	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 14:00	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:35	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 14:00	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:35	JDH	
Zinc [7440-66-6] ^	18.6		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:35	JDH	

Description: 5503-MW25A

Lab Sample ID: C210455-13

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 14:31	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 14:31	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 14:31	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 14:31	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 14:31	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 14:31	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 14:31	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 14:31	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 14:31	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 14:31	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 14:31	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 14:31	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 14:31	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 14:31	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 14:31	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 14:31	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 14:31	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 14:31	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 14:31	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 14:31	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 14:31	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 14:31	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 14:31	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 14:31	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 14:31	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 14:31	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 14:31	JKG	

Description: 5503-MW25A

Lab Sample ID: C210455-13

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 14:31	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	52	1	50.0	103 %	51-122		2J18001	EPA 8260B	10/18/12 14:31	JKG	
Dibromofluoromethane	53	1	50.0	105 %	68-117		2J18001	EPA 8260B	10/18/12 14:31	JKG	
Toluene-d8	50	1	50.0	101 %	67-127		2J18001	EPA 8260B	10/18/12 14:31	JKG	

Description: 5503-MW25A

Lab Sample ID: C210455-13

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	3.87	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 14:04	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:38	JDH	
Barium [7440-39-3] ^	51.0	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:38	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:38	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:38	JDH	
Chromium [7440-47-3] ^	7.47	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:38	JDH	
Cobalt [7440-48-4] ^	11.0		ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:38	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:38	JDH	
Lead [7439-92-1] ^	4.90	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:38	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:38	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 14:04	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:38	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 14:04	VLO	
Vanadium [7440-62-2] ^	4.14	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:38	JDH	
Zinc [7440-66-6] ^	15.3		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:38	JDH	

Description: 5503-MW32R

Lab Sample ID: C210455-14

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:20

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 15:01	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 15:01	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 15:01	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 15:01	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 15:01	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 15:01	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 15:01	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 15:01	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 15:01	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 15:01	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 15:01	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 15:01	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 15:01	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 15:01	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 15:01	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 15:01	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 15:01	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 15:01	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 15:01	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 15:01	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 15:01	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 15:01	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 15:01	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 15:01	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 15:01	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 15:01	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 15:01	JKG	

Description: 5503-MW32R

Lab Sample ID: C210455-14

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:20

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 15:01	JKG	
Surrogates											
4-Bromofluorobenzene	51	1	50.0	103 %	51-122	2J18001	EPA 8260B	10/18/12 15:01	JKG		
Dibromofluoromethane	52	1	50.0	105 %	68-117	2J18001	EPA 8260B	10/18/12 15:01	JKG		
Toluene-d8	51	1	50.0	101 %	67-127	2J18001	EPA 8260B	10/18/12 15:01	JKG		

Description: 5503-MW32R

Lab Sample ID: C210455-14

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:20

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 14:08	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:40	JDH	
Barium [7440-39-3] ^	10.3	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:40	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:40	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:40	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:40	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:40	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:40	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:40	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:40	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 14:08	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:40	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 14:08	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:40	JDH	
Zinc [7440-66-6] ^	5.50	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:40	JDH	

Description: 5503-MW33

Lab Sample ID: C210455-15

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:25

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 15:30	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 15:30	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 15:30	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 15:30	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 15:30	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 15:30	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 15:30	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 15:30	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 15:30	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 15:30	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 15:30	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 15:30	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 15:30	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 15:30	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 15:30	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 15:30	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 15:30	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 15:30	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 15:30	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 15:30	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 15:30	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 15:30	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 15:30	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 15:30	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 15:30	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 15:30	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 15:30	JKG	

Description: 5503-MW33

Lab Sample ID: C210455-15

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:25

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 15:30	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	51	1	50.0	102 %	51-122		2J18001	EPA 8260B	10/18/12 15:30	JKG	
Dibromofluoromethane	53	1	50.0	107 %	68-117		2J18001	EPA 8260B	10/18/12 15:30	JKG	
Toluene-d8	51	1	50.0	102 %	67-127		2J18001	EPA 8260B	10/18/12 15:30	JKG	

Description: 5503-MW33

Lab Sample ID: C210455-15

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:25

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 14:12	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:51	JDH	
Barium [7440-39-3] ^	46.3	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:51	JDH	
Beryllium [7440-41-7] ^	0.181	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:51	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:51	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:51	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:51	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:51	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:51	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:51	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 14:12	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:51	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 14:12	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:51	JDH	
Zinc [7440-66-6] ^	7.22	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:51	JDH	

Description: 5503-MW33A

Lab Sample ID: C210455-16

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:30

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 16:00	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 16:00	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 16:00	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 16:00	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 16:00	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 16:00	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 16:00	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 16:00	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 16:00	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 16:00	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 16:00	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 16:00	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 16:00	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 16:00	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 16:00	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 16:00	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 16:00	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 16:00	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 16:00	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 16:00	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 16:00	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 16:00	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 16:00	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 16:00	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 16:00	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 16:00	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 16:00	JKG	

Description: 5503-MW33A

Lab Sample ID: C210455-16

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:30

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 16:00	JKG	
Surrogates											
4-Bromofluorobenzene	51	1	50.0	102 %	51-122	2J18001	EPA 8260B	10/18/12 16:00	JKG		
Dibromofluoromethane	53	1	50.0	106 %	68-117	2J18001	EPA 8260B	10/18/12 16:00	JKG		
Toluene-d8	51	1	50.0	101 %	67-127	2J18001	EPA 8260B	10/18/12 16:00	JKG		

Description: 5503-MW33A

Lab Sample ID: C210455-16

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:30

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	2.10	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 14:16	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:53	JDH	
Barium [7440-39-3] ^	6.02	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:53	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:53	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:53	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:53	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:53	JDH	
Copper [7440-50-8] ^	2.00	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:53	JDH	
Lead [7439-92-1] ^	4.61	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:53	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:53	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 14:16	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:53	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 14:16	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:53	JDH	
Zinc [7440-66-6] ^	19.8		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:53	JDH	

Description: 5503-MW34

Lab Sample ID: C210455-17

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:35

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 16:30	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 16:30	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 16:30	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 16:30	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 16:30	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 16:30	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 16:30	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 16:30	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 16:30	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 16:30	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 16:30	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 16:30	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 16:30	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 16:30	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 16:30	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 16:30	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 16:30	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 16:30	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 16:30	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 16:30	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 16:30	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 16:30	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 16:30	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 16:30	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 16:30	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 16:30	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 16:30	JKG	

Description: 5503-MW34

Lab Sample ID: C210455-17

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:35

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 16:30	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	51	1	50.0	102 %	51-122		2J18001	EPA 8260B	10/18/12 16:30	JKG	
Dibromofluoromethane	52	1	50.0	105 %	68-117		2J18001	EPA 8260B	10/18/12 16:30	JKG	
Toluene-d8	51	1	50.0	102 %	67-127		2J18001	EPA 8260B	10/18/12 16:30	JKG	

Description: 5503-MW34

Lab Sample ID: C210455-17

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:35

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 14:20	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:55	JDH	
Barium [7440-39-3] ^	202		ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:55	JDH	
Beryllium [7440-41-7] ^	1.18		ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:55	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:55	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:55	JDH	
Cobalt [7440-48-4] ^	4.30	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:55	JDH	
Copper [7440-50-8] ^	3.38	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:55	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:55	JDH	
Nickel [7440-02-0] ^	2.84	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:55	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 14:20	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:55	JDH	
Thallium [7440-28-0] ^	0.203	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 14:20	VLO	
Vanadium [7440-62-2] ^	4.29	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:55	JDH	
Zinc [7440-66-6] ^	19.7		ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:55	JDH	

Description: 5503-MW35

Lab Sample ID: C210455-19

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:45

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 16:59	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 16:59	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 16:59	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 16:59	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 16:59	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 16:59	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 16:59	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 16:59	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 16:59	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 16:59	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 16:59	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 16:59	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 16:59	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 16:59	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 16:59	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 16:59	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 16:59	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 16:59	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 16:59	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 16:59	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 16:59	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 16:59	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 16:59	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 16:59	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 16:59	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 16:59	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 16:59	JKG	

Description: 5503-MW35

Lab Sample ID: C210455-19

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:45

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 16:59	JKG	
Surrogates											
4-Bromofluorobenzene	51	1	50.0	102 %	51-122	2J18001	EPA 8260B	10/18/12 16:59	JKG		
Dibromofluoromethane	53	1	50.0	105 %	68-117	2J18001	EPA 8260B	10/18/12 16:59	JKG		
Toluene-d8	51	1	50.0	102 %	67-127	2J18001	EPA 8260B	10/18/12 16:59	JKG		

Description: 5503-MW35A

Lab Sample ID: C210455-20

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:48

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 17:28	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 17:28	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 17:28	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 17:28	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 17:28	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 17:28	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 17:28	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 17:28	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 17:28	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 17:28	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 17:28	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 17:28	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 17:28	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 17:28	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 17:28	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 17:28	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 17:28	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 17:28	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 17:28	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 17:28	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 17:28	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 17:28	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 17:28	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 17:28	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 17:28	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 17:28	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 17:28	JKG	

Description: 5503-MW35A

Lab Sample ID: C210455-20

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:48

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 17:28	JKG	
Surrogates											
4-Bromofluorobenzene	52	1	50.0	105 %	51-122	2J18001	EPA 8260B	10/18/12 17:28	JKG		
Dibromofluoromethane	53	1	50.0	106 %	68-117	2J18001	EPA 8260B	10/18/12 17:28	JKG		
Toluene-d8	51	1	50.0	101 %	67-127	2J18001	EPA 8260B	10/18/12 17:28	JKG		

Description: 5503-MW35A

Lab Sample ID: C210455-20

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/09/12 09:48

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.640	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 14:24	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/17/12 11:58	JDH	
Barium [7440-39-3] ^	43.7	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/17/12 11:58	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/17/12 11:58	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/17/12 11:58	JDH	
Chromium [7440-47-3] ^	3.07	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/17/12 11:58	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/17/12 11:58	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/17/12 11:58	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:58	JDH	
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/17/12 11:58	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 14:24	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/17/12 11:58	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 14:24	VLO	
Vanadium [7440-62-2] ^	3.43	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/17/12 11:58	JDH	
Zinc [7440-66-6] ^	9.62	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/17/12 11:58	JDH	

Description: 5503-Trip Blank

Lab Sample ID: C210455-21

Received: 10/11/12 09:02

Matrix: Water

Sampled: 10/09/12 08:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By:

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/18/12 17:58	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/18/12 17:58	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/18/12 17:58	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 17:58	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/18/12 17:58	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/18/12 17:58	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/18/12 17:58	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/18/12 17:58	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/18/12 17:58	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/18/12 17:58	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/18/12 17:58	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/18/12 17:58	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/18/12 17:58	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/18/12 17:58	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/18/12 17:58	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 17:58	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/18/12 17:58	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/18/12 17:58	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/18/12 17:58	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/18/12 17:58	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/18/12 17:58	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/18/12 17:58	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/18/12 17:58	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/18/12 17:58	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/18/12 17:58	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/18/12 17:58	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/18/12 17:58	JKG	

Description: 5503-Trip Blank

Lab Sample ID: C210455-21

Received: 10/11/12 09:02

Matrix: Water

Sampled: 10/09/12 08:15

Work Order: C210455

Project: Lincoln County LF - App Is

Sampled By:

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/18/12 17:58	JKG	
Surrogates											
4-Bromofluorobenzene	51	1	50.0	102 %	51-122	2J18001	EPA 8260B	10/18/12 17:58	JKG		
Dibromofluoromethane	53	1	50.0	106 %	68-117	2J18001	EPA 8260B	10/18/12 17:58	JKG		
Toluene-d8	50	1	50.0	101 %	67-127	2J18001	EPA 8260B	10/18/12 17:58	JKG		

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J18001 - EPA 5030B_MS

Blank (2J18001-BLK1)

Prepared: 10/18/2012 06:31 Analyzed: 10/18/2012 08:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							

Surrogate: 4-Bromofluorobenzene

52

ug/L

50.0

104

51-122

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J18001 - EPA 5030B_MS

Blank (2J18001-BLK1) Continued

Prepared: 10/18/2012 06:31 Analyzed: 10/18/2012 08:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	52			ug/L	50.0		105	68-117			
Surrogate: Toluene-d8	51			ug/L	50.0		103	67-127			

LCS (2J18001-BS1)

Prepared: 10/18/2012 06:31 Analyzed: 10/18/2012 08:37

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0		112	75-133			
Benzene	21		1.0	ug/L	20.0		103	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		103	83-117			
Toluene	21		1.0	ug/L	20.0		103	71-118			
Trichloroethene	22		1.0	ug/L	20.0		112	74-119			

Matrix Spike (2J18001-MS1)

Prepared: 10/18/2012 06:31 Analyzed: 10/18/2012 09:07

Source: C212186-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.21 U	102	75-133			
Benzene	19		1.0	ug/L	20.0	0.15 U	96	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	97	83-117			
Toluene	19		1.0	ug/L	20.0	0.14 U	96	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	105	74-119			

Matrix Spike Dup (2J18001-MSD1)

Prepared: 10/18/2012 06:31 Analyzed: 10/18/2012 09:36

Source: C212186-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.21 U	97	75-133	4	20	
Benzene	18		1.0	ug/L	20.0	0.15 U	91	81-134	5	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	95	83-117	2	16	
Toluene	18		1.0	ug/L	20.0	0.14 U	92	71-118	5	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	102	74-119	4	22	

Batch 2J18005 - EPA 5030B_MS

Blank (2J18005-BLK1)

Prepared: 10/18/2012 08:56 Analyzed: 10/18/2012 17:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control
Batch 2J18005 - EPA 5030B_MS
Blank (2J18005-BLK1) Continued

Prepared: 10/18/2012 08:56 Analyzed: 10/18/2012 17:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
<i>Surrogate: 4-Bromofluorobenzene</i>	45			ug/L	50.0		90	51-122			
<i>Surrogate: Dibromofluoromethane</i>	54			ug/L	50.0		108	68-117			
<i>Surrogate: Toluene-d8</i>	45			ug/L	50.0		90	67-127			

LCS (2J18005-BS1)

Prepared: 10/18/2012 08:56 Analyzed: 10/18/2012 17:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	24		1.0	ug/L	20.0		122	75-133			
Benzene	22		1.0	ug/L	20.0		111	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		103	83-117			
Toluene	23		1.0	ug/L	20.0		113	71-118			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J18005 - EPA 5030B_MS

LCS (2J18005-BS1) Continued

Prepared: 10/18/2012 08:56 Analyzed: 10/18/2012 17:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichloroethene	21		1.0	ug/L	20.0		107	74-119			

Matrix Spike (2J18005-MS1)

Prepared: 10/18/2012 08:56 Analyzed: 10/18/2012 18:13

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	114	75-133			
Benzene	21		1.0	ug/L	20.0	0.15 U	103	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	101	83-117			
Toluene	22		1.0	ug/L	20.0	0.14 U	110	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	100	74-119			

Matrix Spike Dup (2J18005-MSD1)

Prepared: 10/18/2012 08:56 Analyzed: 10/18/2012 18:42

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0	0.21 U	126	75-133	9	20	
Benzene	21		1.0	ug/L	20.0	0.15 U	106	81-134	3	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	99	83-117	1	16	
Toluene	22		1.0	ug/L	20.0	0.14 U	111	71-118	1	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	100	74-119	0.4	22	

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 2J15024 - EPA 7470A

Blank (2J15024-BLK1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (2J15024-BS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.51		0.200	ug/L	5.00		90	80-120			

Matrix Spike (2J15024-MS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:09

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.67		0.200	ug/L	5.00	0.170 U	93	75-125			

Matrix Spike Dup (2J15024-MSD1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:11

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.73		0.200	ug/L	5.00	0.170 U	95	75-125	1	25	

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control
Batch 2J15024 - EPA 7470A
Post Spike (2J15024-PS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:13

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.03		0.200	ug/L	5.00	-0.0420	81	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control
Batch 2J12022 - EPA 3005A
Blank (2J12022-BLK1)

Prepared: 10/12/2012 11:11 Analyzed: 10/17/2012 10:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Manganese	1.10	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (2J12022-BS1)

Prepared: 10/12/2012 11:11 Analyzed: 10/17/2012 10:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	201		10.0	ug/L	200		100	80-120			
Barium	209		10.0	ug/L	200		105	80-120			
Beryllium	20.0		1.00	ug/L	20.0		100	80-120			
Cadmium	21.2		1.00	ug/L	20.0		106	80-120			
Chromium	200		10.0	ug/L	200		100	80-120			
Cobalt	202		10.0	ug/L	200		101	80-120			
Copper	198		10.0	ug/L	200		99	80-120			
Iron	1020		50.0	ug/L	1000		102	80-120			
Lead	204		10.0	ug/L	200		102	80-120			
Manganese	200		10.0	ug/L	200		100	80-120			
Nickel	202		10.0	ug/L	200		101	80-120			
Silver	205		10.0	ug/L	200		102	80-120			
Vanadium	202		10.0	ug/L	200		101	80-120			
Zinc	211		10.0	ug/L	200		105	80-120			

Matrix Spike (2J12022-MS1)

Prepared: 10/12/2012 11:11 Analyzed: 10/17/2012 10:54

Source: C210455-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12022 - EPA 3005A

Matrix Spike (2J12022-MS1) Continued

Prepared: 10/12/2012 11:11 Analyzed: 10/17/2012 10:54

Source: C210455-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	207		10.0	ug/L	200	2.80 U	104	75-125			
Barium	239		10.0	ug/L	200	28.7	105	75-125			
Beryllium	21.0		1.00	ug/L	20.0	0.100 U	105	75-125			
Cadmium	21.4		1.00	ug/L	20.0	0.360 U	107	75-125			
Chromium	213		10.0	ug/L	200	3.79	104	75-125			
Cobalt	206		10.0	ug/L	200	1.10 U	103	75-125			
Copper	207		10.0	ug/L	200	2.56	102	75-125			
Iron	1750		50.0	ug/L	1000	660	109	75-125			
Lead	207		10.0	ug/L	200	2.33	102	75-125			
Manganese	222		10.0	ug/L	200	17.2	102	75-125			
Nickel	214		10.0	ug/L	200	2.79	105	75-125			
Silver	212		10.0	ug/L	200	1.90 U	106	75-125			
Vanadium	213		10.0	ug/L	200	1.40 U	106	75-125			
Zinc	229		10.0	ug/L	200	14.9	107	75-125			

Matrix Spike Dup (2J12022-MSD1)

Prepared: 10/12/2012 11:11 Analyzed: 10/17/2012 10:56

Source: C210455-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	204		10.0	ug/L	200	2.80 U	102	75-125	1	20	
Barium	233		10.0	ug/L	200	28.7	102	75-125	3	20	
Beryllium	20.5		1.00	ug/L	20.0	0.100 U	102	75-125	3	20	
Cadmium	21.3		1.00	ug/L	20.0	0.360 U	107	75-125	0.3	20	
Chromium	207		10.0	ug/L	200	3.79	102	75-125	3	20	
Cobalt	206		10.0	ug/L	200	1.10 U	103	75-125	0.03	20	
Copper	202		10.0	ug/L	200	2.56	100	75-125	2	20	
Iron	1840		50.0	ug/L	1000	660	118	75-125	5	20	
Lead	207		10.0	ug/L	200	2.33	102	75-125	0.04	20	
Manganese	218		10.0	ug/L	200	17.2	100	75-125	2	20	
Nickel	208		10.0	ug/L	200	2.79	103	75-125	3	20	
Silver	206		10.0	ug/L	200	1.90 U	103	75-125	3	20	
Vanadium	207		10.0	ug/L	200	1.40 U	104	75-125	3	20	
Zinc	225		10.0	ug/L	200	14.9	105	75-125	2	20	

Post Spike (2J12022-PS1)

Prepared: 10/12/2012 11:11 Analyzed: 10/17/2012 10:58

Source: C210455-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.193		0.0100	mg/L	0.200	0.00150	96	80-120			
Barium	0.229		0.0100	mg/L	0.200	0.0287	100	80-120			
Beryllium	0.0200		0.00100	mg/L	0.0200	8.13E-5	100	80-120			
Cadmium	0.0205		0.00100	mg/L	0.0200	0.000279	101	80-120			
Chromium	0.203		0.0100	mg/L	0.200	0.00379	100	80-120			
Cobalt	0.198		0.0100	mg/L	0.200	0.000338	99	80-120			
Copper	0.198		0.0100	mg/L	0.200	0.00256	98	80-120			
Iron	1.67		0.0500	mg/L	1.00	0.660	101	80-120			
Lead	0.199		0.0100	mg/L	0.200	0.00233	98	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control
Batch 2J12022 - EPA 3005A
Post Spike (2J12022-PS1) Continued

Prepared: 10/12/2012 11:11 Analyzed: 10/17/2012 10:58

Source: C210455-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Manganese	0.218		0.0100	mg/L	0.200	0.0172	100	80-120			
Nickel	0.204		0.0100	mg/L	0.200	0.00279	101	80-120			
Silver	0.206		0.0100	mg/L	0.200	0.000101	103	80-120			
Vanadium	0.202		0.0100	mg/L	0.200	0.00128	101	80-120			
Zinc	0.225		0.0100	mg/L	0.200	0.0149	105	80-120			

Batch 2J12023 - EPA 3005A
Blank (2J12023-BLK1)

Prepared: 10/12/2012 11:14 Analyzed: 10/15/2012 12:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (2J12023-BS1)

Prepared: 10/12/2012 11:14 Analyzed: 10/15/2012 12:39

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	203		2.00	ug/L	200		101	80-120			
Selenium	223		1.00	ug/L	200		112	80-120			
Thallium	212		1.00	ug/L	200		106	80-120			

Matrix Spike (2J12023-MS1)

Prepared: 10/12/2012 11:14 Analyzed: 10/15/2012 12:47

Source: C210455-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	204		2.00	ug/L	200	0.997	102	75-125			
Selenium	215		1.00	ug/L	200	0.830 U	108	75-125			
Thallium	210		1.00	ug/L	200	0.110 U	105	75-125			

Matrix Spike Dup (2J12023-MSD1)

Prepared: 10/12/2012 11:14 Analyzed: 10/15/2012 12:51

Source: C210455-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	203		2.00	ug/L	200	0.997	101	75-125	0.5	20	
Selenium	216		1.00	ug/L	200	0.830 U	108	75-125	0.5	20	
Thallium	209		1.00	ug/L	200	0.110 U	105	75-125	0.2	20	

Post Spike (2J12023-PS1)

Prepared: 10/12/2012 11:14 Analyzed: 10/15/2012 13:03

Source: C210455-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	211		2.00	ug/L	200	0.997	105	80-120			
Selenium	221		1.00	ug/L	200	0.133	111	80-120			
Thallium	216		1.00	ug/L	200	0.0428	108	80-120			

FLAGS/NOTES AND DEFINITIONS

- B The analyte was detected in the associated method blank.
- D The sample was analyzed at dilution.
- J The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
- U The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
- MRL Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.



ENVIRONMENTAL CONSERVATION LABORATORIES

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Orlando, FL 32824
(407) 626-5314 Fax (407) 850-6945

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Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

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CHAIN-OF-CUSTODY RECORD

4810 Executive Park Court, Suite 111
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Sample Name: *Bianca Gibson Shultz*
Sample Preparer Signature: *Bianca Gibson Shultz*

Client Name: S&ME, Inc. (SM002)

Address: 9751 Southern Fine Blvd.

City/State/Zip: Charlotte, NC 28273

Tel: (704) 523-4726 Fax: (704) 525-3953

Reporting Contact: Courtney Murphy

Billing Contact: Barbara Ellington

Site Location / Time Zone:

Project Number: 1356-07-004

Project Name/Desc: Lincoln County LF - App Is

PO # / Billing Info: 50341

Reporting Contact: Courtney Murphy

Billing Contact: Barbara Ellington

Site Location / Time Zone:

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Contm/Grab	Matrix (see codes)	Total # of Containers	Requested Analyses		Preservation (See Codes) (Combine as necessary)	Note : Rush requests subject to acceptance by the facility	Requested Turnaround Times
							Standard	Expedited			
5503-MW1A		10/9/12	0815	G	GW	4	X	X			
5503-MW8		10/10/12	1000	6	GW	4	X	X			
5503-MW9		10/10/12	1000	6	GW	4	X	X			
5503-MW10R		10/10/12	1040	6	GW	4	X	X			
5503-MW12		10/10/12	0845	6	GW	4	X	X			
5503-MW13		10/10/12	0845	6	GW	4	X	X			
5503-MW14		10/10/12	0840	6	GW	4	X	X			
5503-MW15		10/9/12	0805	6	GW	4	X	X			
5503-MW16R		10/9/12	0825	6	GW	4	X	X			
5503-MW47					GW	4	X	X			
5503-MW18		10/9/12	0855	6	GW	4	X	X			
5503-MW19		10/9/12	0850	6	GW	4	X	X			
									36 <- Total # of Containers		
Sample Kit Prepared By: <i>MES</i>		Date/Time: 9/11/12	Received By: <i>Trish Miller</i>	Date/Time: 10/10/12 15:20	Received By: <i>Trish Miller</i>	Date/Time: 10/11/12 2:00	Received By: <i>Trish Miller</i>	Date/Time: 10/11/12 2:00	Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable	Date/Time: 10/11/12 2:00	Condition Upon Receipt: <input checked="" type="checkbox"/> Unacceptable
Comments/Special Reporting Requirements:											
Cooler #'s & temps on Receipt:											

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (Detail in comments)
 Preservation: H-HCl N-NH3 S-H2SO4 NO-NaOH O-Other (Detail in comments)
 Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist



ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

1075 Central Port Dr.
Orlando, FL 32824
(407) 828-5314 Fax (407) 850-6945
(904) 296-3007 Fax (904) 296-6210

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Cary, NC 27511
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Page 2 of 2

Client Name S&ME, Inc. (SIM002)	Project Number 1356-07-004	Requested Analyses						Note : Rush requests subject to acceptance by the facility
		Standard	Expedited	Due / /	Lab Workorder	Requested Turnaround Times		
Address 9751 Southern Pine Blvd.	Project Name/Desc Lincoln County LF - App Is	PO # / Billing Info 50341	Reporting Contact Courtney Murphy	Billing Contact Barbara Ellington	Site Location / Time Zone H	Preservation (See Codes) (Combine as necessary) Ag,As,Ba,Cd,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,V,Zn	SD,Sb,As,Cd,Cu,Fe,Mn,Ni,Pb,Tl,V,Zn	SD,Sb,As,Cd,Cu,Fe,Mn,Ni,Pb,Tl,V,Zn
City/ST/Zip Charlotte, NC 28273	Tel (704) 523-4726 Fax (704) 525-3953							
Sample(s) Name, Affiliation (Print) <i>Drew Wilson Slave</i>	Sampler(s) Signature <i>Jean Wilson</i>							
8260B Appendix 1								
Item #	Sample ID / Field Identification)	Collection Date 10/9/12	Collection Time 0832	Comp / Grate 6	Matrix G/W	Total # of Containers 4	Sample Comments	
5503-MW20								
5503-MW21		10/9/12	0915	6	G/W	4		
5503-MW24		10/9/12	1030	6	G/W	4		
5503-MW25		10/9/12	1015	6	G/W	4	<i>Def</i>	
5503-MW25A		10/9/12	0920	6	G/W	4		
5503-MW32R		10/9/12	0925	6	G/W	4		
5503-MW33		10/9/12	0930	6	G/W	4		
5503-MW33A		10/9/12	0935	6	G/W	4		
5503-MW34		10/9/12	0945	6	G/W	4		
5503-MW35		10/9/12	0948	6	G/W	4	<i>No Metals</i>	
5503-Trip Blank					WA	2		
< Total # of Containers 41								
Sample Kit Prepared By <i>MES</i>	Date/Time 10/10/12	Befurnished By <i>Joe C. Stahr</i>	Date/Time 10/10/12	Received By <i>MES Stamp</i>	Date/Time 10/10/12	Received By <i>Joe C. Stahr</i>	Date/Time 10/10/12	Condition Upon Receipt Acceptable
Comments/Special Reporting Requirements								Unacceptable
Cooler #'s & Temps on Receipt <i>C-22 8.6°C</i>								
Rerlinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	Condition Upon Receipt Acceptable

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: H-HCl N-NHCO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



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Thursday, October 25, 2012

S&ME, Inc. (SM002)

Attn: Courtney Murphy

9751 Southern Pine Blvd.

Charlotte, NC 28273

RE: Laboratory Results for

Project Number: 1356-07-004, Project Name/Desc: Lincoln County LF - C&D

ENCO Workorder(s): C210456

Dear Courtney Murphy,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, October 11, 2012.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith".

Chuck Smith

Project Manager

Enclosure(s)



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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID:	5503-MW26	Lab ID:	C210456-01	Sampled:	10/10/12 11:30	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 300.0		11/07/12		10/18/12	11:37	10/18/2012	11:37
EPA 310.2		10/24/12		10/12/12	12:04	10/12/2012	12:04
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:16
EPA 6020A		04/08/13		10/15/12	10:48	10/16/2012	11:37
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:20
EPA 8260B		10/24/12		10/19/12	08:01	10/19/2012	19:12
SM 2540C		10/17/12		10/12/12	10:05	10/12/2012	10:05

Client ID:	5503-MW27	Lab ID:	C210456-02	Sampled:	10/10/12 11:40	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 300.0		11/07/12		10/18/12	11:53	10/18/2012	11:53
EPA 310.2		10/24/12		10/12/12	12:07	10/12/2012	12:07
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:28
EPA 6020A		04/08/13		10/15/12	10:48	10/16/2012	11:17
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:22
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	08:04
SM 2540C		10/17/12		10/12/12	10:05	10/12/2012	10:05

Client ID:	5503-MW28	Lab ID:	C210456-03	Sampled:	10/10/12 11:50	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 300.0		11/07/12		10/18/12	12:08	10/18/2012	12:08
EPA 310.2		10/24/12		10/12/12	12:08	10/12/2012	12:08
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:30
EPA 6020A		04/08/13		10/15/12	10:48	10/16/2012	11:41
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:28
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	08:35
SM 2540C		10/17/12		10/12/12	10:05	10/12/2012	10:05

Client ID:	5503-MW29	Lab ID:	C210456-04	Sampled:	10/10/12 10:50	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 300.0		11/07/12		10/18/12	12:24	10/18/2012	12:24
EPA 310.2		10/24/12		10/12/12	12:10	10/12/2012	12:10
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:32
EPA 6020A		04/08/13		10/15/12	10:48	10/16/2012	11:45
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:31
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	09:05
SM 2540C		10/17/12		10/12/12	10:05	10/12/2012	10:05

Client ID:	5503-MW30	Lab ID:	C210456-05	Sampled:	10/10/12 11:00	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 300.0		11/07/12		10/18/12	12:39	10/18/2012	12:39
EPA 310.2		10/24/12		10/12/12	12:11	10/12/2012	12:11
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:41
EPA 6020A		04/08/13		10/15/12	10:48	10/16/2012	11:49
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:33
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	09:35
SM 2540C		10/17/12		10/12/12	10:05	10/12/2012	10:05

Client ID:	5503-MW31	Lab ID:	C210456-06	Sampled:	10/10/12 11:10	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 300.0		11/07/12		10/18/12	12:55	10/18/2012	12:55
EPA 310.2		10/24/12		10/12/12	12:12	10/12/2012	12:12
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:43
EPA 6020A		04/08/13		10/15/12	10:48	10/16/2012	11:53
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:36
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	10:04
SM 2540C		10/17/12		10/12/12	10:05	10/12/2012	10:05

Client ID:	5503-TripBlank	Lab ID:	C210456-07	Sampled:	10/10/12 11:00	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	10:34

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID:	Lab ID: C210456-01								
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	91.6	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloride	3300	JB	1	430	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	2.74	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.20	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	276	J	1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	7.82	JB	1	1.10	10.0	50	ug/L	EPA 6010C	J-01
Sulfate as SO4	3400	J	1	40	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	34000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	100000		1	10000	10000	NE	ug/L	SM 2540C	
Zinc - Total	12.8		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID:	Lab ID: C210456-02								
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	355		1	1.00	10.0	100	ug/L	EPA 6010C	
Benzene	0.53	J	1	0.15	1.0	1	ug/L	EPA 8260B	
Beryllium - Total	0.479	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Cadmium - Total	0.380	J	1	0.360	1.00	1	ug/L	EPA 6010C	
Chloride	21000	B	1	430	5000	NE	ug/L	EPA 300.0	QB-01
Chromium - Total	1.49	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	15.2		1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	704		1	22.0	50.0	300	ug/L	EPA 6010C	
Lead - Total	2.65	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Manganese - Total	1350	B	1	1.10	10.0	50	ug/L	EPA 6010C	QB-01
Nickel - Total	23.7	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Sulfate as SO4	48000	J	1	40	5000	250000	ug/L	EPA 300.0	
Tetrahydrofuran	14		1	0.80	1.0	NE	ug/L	EPA 8260B	
Thallium - Total	0.139	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Total Alkalinity as CaCO3	62000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	330000		1	10000	10000	NE	ug/L	SM 2540C	
Vanadium - Total	1.78	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Xylenes (Total)	0.47	J	1	0.45	3.0	5	ug/L	EPA 8260B	
Zinc - Total	20.3		1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID:	Lab ID: C210456-03								
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetone	22	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Barium - Total	77.3	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Beryllium - Total	0.120	J	1	0.100	1.00	1	ug/L	EPA 6010C	
Chloride	2200	JB	1	430	5000	NE	ug/L	EPA 300.0	J-01
Cobalt - Total	1.68	J	1	1.10	10.0	10	ug/L	EPA 6010C	
Iron - Total	39.1	J	1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	18.5	JB	1	1.10	10.0	50	ug/L	EPA 6010C	J-01
Nickel - Total	3.75	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Sulfate as SO4	2000	J	1	40	5000	250000	ug/L	EPA 300.0	
Tetrachloroethene	6.9		1	0.17	1.0	1	ug/L	EPA 8260B	
Total Dissolved Solids	110000		1	10000	10000	NE	ug/L	SM 2540C	
Trichlorofluoromethane	0.42	J	1	0.24	1.0	1	ug/L	EPA 8260B	
Vinyl chloride	0.53	J	1	0.32	1.0	1	ug/L	EPA 8260B	
Zinc - Total	8.04	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW29		Lab ID: C210456-04							
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Acetone	18	J	1	1.2	5.0	100	ug/L	EPA 8260B	
Barium - Total	11.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloride	4200	JB	1	430	5000	NE	ug/L	EPA 300.0	J-01
Copper - Total	3.30	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	11100		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	43.0	JB	1	1.10	10.0	50	ug/L	EPA 6010C	QB-01
Sulfate as SO4	7200	J	1	40	5000	250000	ug/L	EPA 300.0	
Thallium - Total	0.238	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	
Total Alkalinity as CaCO3	74000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	140000		1	10000	10000	NE	ug/L	SM 2540C	
Zinc - Total	5.55	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW30		Lab ID: C210456-05							
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	54.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloride	2300	JB	1	430	5000	NE	ug/L	EPA 300.0	J-01
Chromium - Total	1.03	J	1	1.00	10.0	10	ug/L	EPA 6010C	
Copper - Total	2.58	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	1250		1	22.0	50.0	300	ug/L	EPA 6010C	
Lead - Total	2.01	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Manganese - Total	24.6	JB	1	1.10	10.0	50	ug/L	EPA 6010C	QB-01
Nickel - Total	2.64	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Sulfate as SO4	4000	J	1	40	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	13000	J	1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	110000		1	10000	10000	NE	ug/L	SM 2540C	
Vanadium - Total	1.70	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	7.63	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-MW31		Lab ID: C210456-06							
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Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total	7.36	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Chloride	2400	JB	1	430	5000	NE	ug/L	EPA 300.0	J-01
Copper - Total	3.38	J	1	1.60	10.0	10	ug/L	EPA 6010C	
Iron - Total	7320		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total	38.7	JB	1	1.10	10.0	50	ug/L	EPA 6010C	QB-01
Sulfate as SO4	11000	J	1	40	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	16000		1	12000	15000	NE	ug/L	EPA 310.2	
Total Dissolved Solids	150000		1	10000	10000	NE	ug/L	SM 2540C	
Zinc - Total	12.9		1	3.80	10.0	10	ug/L	EPA 6010C	

ANALYTICAL RESULTS

Description: 5503-MW26

Lab Sample ID: C210456-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:30

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 19:12	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 19:12	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 19:12	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 19:12	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 19:12	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 19:12	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 19:12	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 19:12	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 19:12	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 19:12	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 19:12	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 19:12	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 19:12	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 19:12	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 19:12	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 19:12	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 19:12	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 19:12	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 19:12	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 19:12	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 19:12	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 19:12	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	10/19/12 19:12	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 19:12	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 19:12	JKG	

Description: 5503-MW26

Lab Sample ID: C210456-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:30

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 19:12	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 19:12	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 19:12	JKG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	50	1	50.0	100 %	51-122	2J19005	EPA 8260B	10/19/12 19:12	JKG	
Dibromofluoromethane	53	1	50.0	106 %	68-117	2J19005	EPA 8260B	10/19/12 19:12	JKG	
Toluene-d8	49	1	50.0	99 %	67-127	2J19005	EPA 8260B	10/19/12 19:12	JKG	

Description: 5503-MW26**Lab Sample ID:** C210456-01**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 11:30**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:20	T1D	

Description: 5503-MW26

Lab Sample ID: C210456-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:30

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/16/12 11:37	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:16	JDH	
Barium [7440-39-3] ^	91.6	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:16	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:16	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:16	JDH	
Chromium [7440-47-3] ^	2.74	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:16	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:16	JDH	
Copper [7440-50-8] ^	2.20	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:16	JDH	
Iron [7439-89-6] ^	276	J	ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:16	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:16	JDH	
Manganese [7439-96-5] ^	7.82	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:16	JDH	J-01
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:16	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/16/12 11:37	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:16	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/16/12 11:37	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:16	JDH	
Zinc [7440-66-6] ^	12.8		ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:16	JDH	

Description: 5503-MW26**Lab Sample ID:** C210456-01**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 11:30**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Classical Chemistry Parameters***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	3300	JB	ug/L	1	430	5000	NE	EPA 300.0	10/18/12 11:37	AJB	J-01
Sulfate as SO4 [14808-79-8] ^	3400	J	ug/L	1	40	5000	250000	EPA 300.0	10/18/12 11:37	AJB	
Total Alkalinity as CaCO3 [471-34-1] ^	34000		ug/L	1	12000	15000	NE	EPA 310.2	10/12/12 12:04	AJB	
Total Dissolved Solids [ECL-0156] ^	100000		ug/L	1	10000	10000	NE	SM 2540C	10/12/12 10:05	MPL	

Description: 5503-MW27

Lab Sample ID: C210456-02

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:40

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 08:04	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 08:04	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 08:04	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 08:04	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 08:04	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 08:04	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 08:04	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 08:04	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 08:04	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 08:04	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 08:04	JKG	
Benzene [71-43-2] ^	0.53	J	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 08:04	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 08:04	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 08:04	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 08:04	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 08:04	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 08:04	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 08:04	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 08:04	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 08:04	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 08:04	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 08:04	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Tetrahydrofuran [109-99-9] ^	14		ug/L	1	0.80	1.0	NE	EPA 8260B	10/19/12 08:04	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 08:04	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 08:04	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 08:04	JKG	

Description: 5503-MW27

Lab Sample ID: C210456-02

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:40

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 08:04	JKG	
Xylenes (Total) [1330-20-7] ^	0.47	J	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 08:04	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	45	1	50.0	91 %	51-122	2J18014	EPA 8260B	10/19/12 08:04	JKG		
Dibromofluoromethane	49	1	50.0	97 %	68-117	2J18014	EPA 8260B	10/19/12 08:04	JKG		
Toluene-d8	44	1	50.0	88 %	67-127	2J18014	EPA 8260B	10/19/12 08:04	JKG		

Description: 5503-MW27**Lab Sample ID:** C210456-02**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 11:40**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:22	T1D	

Description: 5503-MW27

Lab Sample ID: C210456-02

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:40

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/16/12 11:17	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:28	JDH	
Barium [7440-39-3] ^	355		ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:28	JDH	
Beryllium [7440-41-7] ^	0.479	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:28	JDH	
Cadmium [7440-43-9] ^	0.380	J	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:28	JDH	
Chromium [7440-47-3] ^	1.49	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:28	JDH	
Cobalt [7440-48-4] ^	15.2		ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:28	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:28	JDH	
Iron [7439-89-6] ^	704		ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:28	JDH	
Lead [7439-92-1] ^	2.65	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:28	JDH	
Manganese [7439-96-5] ^	1350	B	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:28	JDH	QB-01
Nickel [7440-02-0] ^	23.7	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:28	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/16/12 11:17	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:28	JDH	
Thallium [7440-28-0] ^	0.139	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/16/12 11:17	VLO	
Vanadium [7440-62-2] ^	1.78	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:28	JDH	
Zinc [7440-66-6] ^	20.3		ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:28	JDH	

Description: 5503-MW27

Lab Sample ID: C210456-02

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:40

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Classical Chemistry Parameters

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	21000	B	ug/L	1	430	5000	NE	EPA 300.0	10/18/12 11:53	AJB	QB-01
Sulfate as SO4 [14808-79-8] ^	48000	J	ug/L	1	40	5000	250000	EPA 300.0	10/18/12 11:53	AJB	
Total Alkalinity as CaCO3 [471-34-1] ^	62000		ug/L	1	12000	15000	NE	EPA 310.2	10/12/12 12:07	AJB	
Total Dissolved Solids [ECL-0156] ^	330000		ug/L	1	10000	10000	NE	SM 2540C	10/12/12 10:05	MPL	

Description: 5503-MW28

Lab Sample ID: C210456-03

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:50

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 08:35	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 08:35	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 08:35	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 08:35	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 08:35	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 08:35	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 08:35	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 08:35	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 08:35	JKG	
Acetone [67-64-1] ^	22	J	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 08:35	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 08:35	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 08:35	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 08:35	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 08:35	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 08:35	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 08:35	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 08:35	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 08:35	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 08:35	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 08:35	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 08:35	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 08:35	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Tetrachloroethene [127-18-4] ^	6.9		ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	10/19/12 08:35	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 08:35	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 08:35	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Trichlorofluoromethane [75-69-4] ^	0.42	J	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 08:35	JKG	

Description: 5503-MW28

Lab Sample ID: C210456-03

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:50

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Vinyl chloride [75-01-4] ^	0.53	J	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 08:35	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 08:35	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	47	1	50.0	95 %	51-122	2J18014	EPA 8260B	10/19/12 08:35	JKG		
Dibromofluoromethane	52	1	50.0	104 %	68-117	2J18014	EPA 8260B	10/19/12 08:35	JKG		
Toluene-d8	46	1	50.0	91 %	67-127	2J18014	EPA 8260B	10/19/12 08:35	JKG		

Description: 5503-MW28**Lab Sample ID:** C210456-03**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 11:50**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:28	T1D	

Description: 5503-MW28

Lab Sample ID: C210456-03

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:50

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/16/12 11:41	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:30	JDH	
Barium [7440-39-3] ^	77.3	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:30	JDH	
Beryllium [7440-41-7] ^	0.120	J	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:30	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:30	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:30	JDH	
Cobalt [7440-48-4] ^	1.68	J	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:30	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:30	JDH	
Iron [7439-89-6] ^	39.1	J	ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:30	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:30	JDH	
Manganese [7439-96-5] ^	18.5	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:30	JDH	J-01
Nickel [7440-02-0] ^	3.75	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:30	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/16/12 11:41	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:30	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/16/12 11:41	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:30	JDH	
Zinc [7440-66-6] ^	8.04	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:30	JDH	

Description: 5503-MW28

Lab Sample ID: C210456-03

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:50

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Classical Chemistry Parameters

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	2200	JB	ug/L	1	430	5000	NE	EPA 300.0	10/18/12 12:08	AJB	J-01
Sulfate as SO4 [14808-79-8] ^	2000	J	ug/L	1	40	5000	250000	EPA 300.0	10/18/12 12:08	AJB	
Total Alkalinity as CaCO3 [471-34-1] ^	12000	U	ug/L	1	12000	15000	NE	EPA 310.2	10/12/12 12:08	AJB	
Total Dissolved Solids [ECL-0156] ^	110000		ug/L	1	10000	10000	NE	SM 2540C	10/12/12 10:05	MPL	

Description: 5503-MW29

Lab Sample ID: C210456-04

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:50

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 09:05	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 09:05	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 09:05	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 09:05	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 09:05	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 09:05	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 09:05	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 09:05	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 09:05	JKG	
Acetone [67-64-1] ^	18	J	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 09:05	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 09:05	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 09:05	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 09:05	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 09:05	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 09:05	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 09:05	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 09:05	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 09:05	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 09:05	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 09:05	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 09:05	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 09:05	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	10/19/12 09:05	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 09:05	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 09:05	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 09:05	JKG	

Description: 5503-MW29

Lab Sample ID: C210456-04

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:50

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 09:05	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 09:05	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	44	1	50.0	88 %	51-122		ZJ18014	EPA 8260B	10/19/12 09:05	JKG	
Dibromofluoromethane	50	1	50.0	100 %	68-117		ZJ18014	EPA 8260B	10/19/12 09:05	JKG	
Toluene-d8	44	1	50.0	89 %	67-127		ZJ18014	EPA 8260B	10/19/12 09:05	JKG	

Description: 5503-MW29**Lab Sample ID:** C210456-04**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 10:50**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:31	T1D	

Description: 5503-MW29

Lab Sample ID: C210456-04

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 10:50

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/16/12 11:45	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:32	JDH	
Barium [7440-39-3] ^	11.7	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:32	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:32	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:32	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:32	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:32	JDH	
Copper [7440-50-8] ^	3.30	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:32	JDH	
Iron [7439-89-6] ^	11100		ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:32	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:32	JDH	
Manganese [7439-96-5] ^	43.0	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:32	JDH	QB-01
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:32	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/16/12 11:45	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:32	JDH	
Thallium [7440-28-0] ^	0.238	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/16/12 11:45	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:32	JDH	
Zinc [7440-66-6] ^	5.55	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:32	JDH	

Description: 5503-MW29**Lab Sample ID:** C210456-04**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 10:50**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Classical Chemistry Parameters***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	4200	JB	ug/L	1	430	5000	NE	EPA 300.0	10/18/12 12:24	AJB	J-01
Sulfate as SO4 [14808-79-8] ^	7200	J	ug/L	1	40	5000	250000	EPA 300.0	10/18/12 12:24	AJB	
Total Alkalinity as CaCO3 [471-34-1] ^	74000		ug/L	1	12000	15000	NE	EPA 310.2	10/12/12 12:10	AJB	
Total Dissolved Solids [ECL-0156] ^	140000		ug/L	1	10000	10000	NE	SM 2540C	10/12/12 10:05	MPL	

Description: 5503-MW30

Lab Sample ID: C210456-05

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:00

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 09:35	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 09:35	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 09:35	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 09:35	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 09:35	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 09:35	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 09:35	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 09:35	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 09:35	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 09:35	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 09:35	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 09:35	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 09:35	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 09:35	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 09:35	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 09:35	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 09:35	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 09:35	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 09:35	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 09:35	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 09:35	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 09:35	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	10/19/12 09:35	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 09:35	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 09:35	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 09:35	JKG	

Description: 5503-MW30

Lab Sample ID: C210456-05

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:00

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 09:35	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 09:35	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122		ZJ18014	EPA 8260B	10/19/12 09:35	JKG	
Dibromofluoromethane	51	1	50.0	102 %	68-117		ZJ18014	EPA 8260B	10/19/12 09:35	JKG	
Toluene-d8	45	1	50.0	89 %	67-127		ZJ18014	EPA 8260B	10/19/12 09:35	JKG	

Description: 5503-MW30**Lab Sample ID:** C210456-05**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 11:00**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:33	T1D	

Description: 5503-MW30

Lab Sample ID: C210456-05

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:00

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/16/12 11:49	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:41	JDH	
Barium [7440-39-3] ^	54.4	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:41	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:41	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:41	JDH	
Chromium [7440-47-3] ^	1.03	J	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:41	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:41	JDH	
Copper [7440-50-8] ^	2.58	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:41	JDH	
Iron [7439-89-6] ^	1250		ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:41	JDH	
Lead [7439-92-1] ^	2.01	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:41	JDH	
Manganese [7439-96-5] ^	24.6	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:41	JDH	QB-01
Nickel [7440-02-0] ^	2.64	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:41	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/16/12 11:49	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:41	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/16/12 11:49	VLO	
Vanadium [7440-62-2] ^	1.70	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:41	JDH	
Zinc [7440-66-6] ^	7.63	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:41	JDH	

Description: 5503-MW30

Lab Sample ID: C210456-05

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:00

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Classical Chemistry Parameters

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	2300	JB	ug/L	1	430	5000	NE	EPA 300.0	10/18/12 12:39	AJB	J-01
Sulfate as SO4 [14808-79-8] ^	4000	J	ug/L	1	40	5000	250000	EPA 300.0	10/18/12 12:39	AJB	
Total Alkalinity as CaCO3 [471-34-1] ^	13000	J	ug/L	1	12000	15000	NE	EPA 310.2	10/12/12 12:11	AJB	
Total Dissolved Solids [ECL-0156] ^	110000		ug/L	1	10000	10000	NE	SM 2540C	10/12/12 10:05	MPL	

Description: 5503-MW31

Lab Sample ID: C210456-06

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:10

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 10:04	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 10:04	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 10:04	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 10:04	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 10:04	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 10:04	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 10:04	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 10:04	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 10:04	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 10:04	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 10:04	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 10:04	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 10:04	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 10:04	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 10:04	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 10:04	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 10:04	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 10:04	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 10:04	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 10:04	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 10:04	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 10:04	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	10/19/12 10:04	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 10:04	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 10:04	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 10:04	JKG	

Description: 5503-MW31

Lab Sample ID: C210456-06

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:10

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 10:04	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 10:04	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	47	1	50.0	95 %	51-122		ZJ18014	EPA 8260B	10/19/12 10:04	JKG	
Dibromofluoromethane	51	1	50.0	102 %	68-117		ZJ18014	EPA 8260B	10/19/12 10:04	JKG	
Toluene-d8	45	1	50.0	90 %	67-127		ZJ18014	EPA 8260B	10/19/12 10:04	JKG	

Description: 5503-MW31**Lab Sample ID:** C210456-06**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 11:10**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:36	T1D	

Description: 5503-MW31

Lab Sample ID: C210456-06

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 11:10

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/16/12 11:53	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:43	JDH	
Barium [7440-39-3] ^	7.36	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:43	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:43	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:43	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:43	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:43	JDH	
Copper [7440-50-8] ^	3.38	J	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:43	JDH	
Iron [7439-89-6] ^	7320		ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:43	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:43	JDH	
Manganese [7439-96-5] ^	38.7	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:43	JDH	QB-01
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:43	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/16/12 11:53	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:43	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/16/12 11:53	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:43	JDH	
Zinc [7440-66-6] ^	12.9		ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:43	JDH	

Description: 5503-MW31**Lab Sample ID:** C210456-06**Received:** 10/11/12 09:02**Matrix:** Ground Water**Sampled:** 10/10/12 11:10**Work Order:** C210456**Project:** Lincoln County LF - C&D**Sampled By:** Brian E. Wilson**Classical Chemistry Parameters**

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Chloride [16887-00-6] ^	2400	JB	ug/L	1	430	5000	NE	EPA 300.0	10/18/12 12:55	AJB	J-01
Sulfate as SO4 [14808-79-8] ^	11000	J	ug/L	1	40	5000	250000	EPA 300.0	10/18/12 12:55	AJB	
Total Alkalinity as CaCO3 [471-34-1] ^	16000		ug/L	1	12000	15000	NE	EPA 310.2	10/12/12 12:12	AJB	
Total Dissolved Solids [ECL-0156] ^	150000		ug/L	1	10000	10000	NE	SM 2540C	10/12/12 10:05	MPL	

Description: 5503-TripBlank

Lab Sample ID: C210456-07

Received: 10/11/12 09:02

Matrix: Water

Sampled: 10/10/12 11:00

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: ENCO

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 10:34	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 10:34	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 10:34	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 10:34	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 10:34	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 10:34	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 10:34	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 10:34	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 10:34	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 10:34	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 10:34	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 10:34	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 10:34	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 10:34	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 10:34	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 10:34	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 10:34	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 10:34	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 10:34	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 10:34	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 10:34	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 10:34	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Tetrahydrofuran [109-99-9] ^	0.80	U	ug/L	1	0.80	1.0	NE	EPA 8260B	10/19/12 10:34	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 10:34	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 10:34	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 10:34	JKG	

Description: 5503-TripBlank

Lab Sample ID: C210456-07

Received: 10/11/12 09:02

Matrix: Water

Sampled: 10/10/12 11:00

Work Order: C210456

Project: Lincoln County LF - C&D

Sampled By: ENCO

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 10:34	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 10:34	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	90 %	51-122		ZJ18014	EPA 8260B	10/19/12 10:34	JKG	
Dibromofluoromethane	49	1	50.0	98 %	68-117		ZJ18014	EPA 8260B	10/19/12 10:34	JKG	
Toluene-d8	43	1	50.0	87 %	67-127		ZJ18014	EPA 8260B	10/19/12 10:34	JKG	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J18014 - EPA 5030B_MS

Blank (2J18014-BLK1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 05:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Tetrahydrofuran	0.80	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J18014 - EPA 5030B_MS

Blank (2J18014-BLK1) Continued

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 05:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	46			ug/L	50.0		92	51-122			
Surrogate: Dibromofluoromethane	51			ug/L	50.0		103	68-117			
Surrogate: Toluene-d8	45			ug/L	50.0		90	67-127			

LCS (2J18014-BS1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 06:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0		116	75-133			
Benzene	21		1.0	ug/L	20.0		107	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		99	83-117			
Toluene	22		1.0	ug/L	20.0		112	71-118			
Trichloroethene	21		1.0	ug/L	20.0		106	74-119			

Matrix Spike (2J18014-MS1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 06:35

Source: C212186-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	114	75-133			
Benzene	21		1.0	ug/L	20.0	0.15 U	105	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	97	83-117			
Toluene	22		1.0	ug/L	20.0	0.14 U	108	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	102	74-119			

Matrix Spike Dup (2J18014-MSD1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 07:05

Source: C212186-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.21 U	112	75-133	1	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	102	81-134	3	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	97	83-117	0.05	16	
Toluene	22		1.0	ug/L	20.0	0.14 U	108	71-118	0.2	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	102	74-119	0.1	22	

Batch 2J19005 - EPA 5030B_MS

Blank (2J19005-BLK1)

Prepared: 10/19/2012 08:01 Analyzed: 10/19/2012 09:39

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J19005 - EPA 5030B_MS

Blank (2J19005-BLK1) Continued

Prepared: 10/19/2012 08:01 Analyzed: 10/19/2012 09:39

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Tetrahydrofuran	0.80	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							
<i>Surrogate: 4-Bromofluorobenzene</i>	52			ug/L	50.0		103	51-122			
<i>Surrogate: Dibromofluoromethane</i>	51			ug/L	50.0		102	68-117			
<i>Surrogate: Toluene-d8</i>	50			ug/L	50.0		99	67-127			

LCS (2J19005-BS1)

Prepared: 10/19/2012 08:01 Analyzed: 10/19/2012 10:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0		96	75-133			
Benzene	18		1.0	ug/L	20.0		90	81-134			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J19005 - EPA 5030B_MS

LCS (2J19005-BS1) Continued

Prepared: 10/19/2012 08:01 Analyzed: 10/19/2012 10:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorobenzene	20		1.0	ug/L	20.0		101	83-117			
Toluene	19		1.0	ug/L	20.0		96	71-118			
Trichloroethene	21		1.0	ug/L	20.0		106	74-119			

Matrix Spike (2J19005-MS1)

Prepared: 10/19/2012 08:01 Analyzed: 10/19/2012 10:38

Source: C212186-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.21 U	94	75-133			
Benzene	18		1.0	ug/L	20.0	0.15 U	88	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	96	83-117			
Toluene	18		1.0	ug/L	20.0	0.14 U	90	71-118			
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	105	74-119			

Matrix Spike Dup (2J19005-MSD1)

Prepared: 10/19/2012 08:01 Analyzed: 10/19/2012 11:07

Source: C212186-10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.21 U	95	75-133	1	20	
Benzene	18		1.0	ug/L	20.0	0.15 U	91	81-134	2	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	98	83-117	2	16	
Toluene	19		1.0	ug/L	20.0	0.14 U	95	71-118	5	17	
Trichloroethene	21		1.0	ug/L	20.0	0.15 U	106	74-119	0.5	22	

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 2J15024 - EPA 7470A

Blank (2J15024-BLK1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (2J15024-BS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.51		0.200	ug/L	5.00		90	80-120			

Matrix Spike (2J15024-MS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:09

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.67		0.200	ug/L	5.00	0.170 U	93	75-125			

Matrix Spike Dup (2J15024-MSD1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:11

Source: C211677-03

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 2J15024 - EPA 7470A

Matrix Spike Dup (2J15024-MSD1) Continued

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:11

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.73		0.200	ug/L	5.00	0.170 U	95	75-125	1	25	

Post Spike (2J15024-PS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:13

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.03		0.200	ug/L	5.00	-0.0420	81	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Blank (2J12014-BLK1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Manganese	2.14	J	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (2J12014-BS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	198		10.0	ug/L	200		99	80-120			
Barium	205		10.0	ug/L	200		102	80-120			
Beryllium	19.9		1.00	ug/L	20.0		99	80-120			
Cadmium	20.8		1.00	ug/L	20.0		104	80-120			
Chromium	199		10.0	ug/L	200		99	80-120			
Cobalt	200		10.0	ug/L	200		100	80-120			
Copper	196		10.0	ug/L	200		98	80-120			
Iron	1020		50.0	ug/L	1000		102	80-120			
Lead	202		10.0	ug/L	200		101	80-120			
Manganese	201	B	10.0	ug/L	200		101	80-120			
Nickel	201		10.0	ug/L	200		101	80-120			
Silver	204		10.0	ug/L	200		102	80-120			
Vanadium	201		10.0	ug/L	200		101	80-120			
Zinc	206		10.0	ug/L	200		103	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Matrix Spike (2J12014-MS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:19

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	199		10.0	ug/L	200	2.80 U	99	75-125			
Barium	292		10.0	ug/L	200	91.6	100	75-125			
Beryllium	20.1		1.00	ug/L	20.0	0.100 U	101	75-125			
Cadmium	21.0		1.00	ug/L	20.0	0.360 U	105	75-125			
Chromium	203		10.0	ug/L	200	2.74	100	75-125			
Cobalt	203		10.0	ug/L	200	1.10 U	101	75-125			
Copper	200		10.0	ug/L	200	2.20	99	75-125			
Iron	1330		50.0	ug/L	1000	276	105	75-125			
Lead	200		10.0	ug/L	200	1.90 U	100	75-125			
Manganese	208	B	10.0	ug/L	200	7.82	100	75-125			
Nickel	204		10.0	ug/L	200	1.80 U	102	75-125			
Silver	202		10.0	ug/L	200	1.90 U	101	75-125			
Vanadium	203		10.0	ug/L	200	1.40 U	102	75-125			
Zinc	214		10.0	ug/L	200	12.8	100	75-125			

Matrix Spike Dup (2J12014-MSD1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:21

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	198		10.0	ug/L	200	2.80 U	99	75-125	0.2	20	
Barium	299		10.0	ug/L	200	91.6	103	75-125	2	20	
Beryllium	20.5		1.00	ug/L	20.0	0.100 U	102	75-125	2	20	
Cadmium	21.1		1.00	ug/L	20.0	0.360 U	105	75-125	0.3	20	
Chromium	207		10.0	ug/L	200	2.74	102	75-125	2	20	
Cobalt	204		10.0	ug/L	200	1.10 U	102	75-125	0.7	20	
Copper	203		10.0	ug/L	200	2.20	100	75-125	2	20	
Iron	1340		50.0	ug/L	1000	276	106	75-125	1	20	
Lead	203		10.0	ug/L	200	1.90 U	101	75-125	1	20	
Manganese	212	B	10.0	ug/L	200	7.82	102	75-125	2	20	
Nickel	207		10.0	ug/L	200	1.80 U	104	75-125	2	20	
Silver	207		10.0	ug/L	200	1.90 U	104	75-125	2	20	
Vanadium	207		10.0	ug/L	200	1.40 U	103	75-125	2	20	
Zinc	219		10.0	ug/L	200	12.8	103	75-125	2	20	

Post Spike (2J12014-PS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:23

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.189		0.0100	mg/L	0.200	0.00143	94	80-120			
Barium	0.285		0.0100	mg/L	0.200	0.0916	97	80-120			
Beryllium	0.0197		0.00100	mg/L	0.0200	6.60E-5	98	80-120			
Cadmium	0.0201		0.00100	mg/L	0.0200	6.62E-6	101	80-120			
Chromium	0.198		0.0100	mg/L	0.200	0.00274	98	80-120			
Cobalt	0.195		0.0100	mg/L	0.200	0.000335	97	80-120			
Copper	0.194		0.0100	mg/L	0.200	0.00220	96	80-120			
Iron	1.28		0.0500	mg/L	1.00	0.276	100	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Post Spike (2J12014-PS1) Continued

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:23

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Lead	0.194		0.0100	mg/L	0.200	0.000340	97	80-120			
Manganese	0.203	B	0.0100	mg/L	0.200	0.00782	98	80-120			
Nickel	0.200		0.0100	mg/L	0.200	0.00176	99	80-120			
Silver	0.203		0.0100	mg/L	0.200	-9.92E-5	102	80-120			
Vanadium	0.198		0.0100	mg/L	0.200	0.00114	99	80-120			
Zinc	0.211		0.0100	mg/L	0.200	0.0128	99	80-120			

Batch 2J15022 - EPA 3005A

Blank (2J15022-BLK1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (2J15022-BS1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200		103	80-120			
Selenium	221		1.00	ug/L	200		110	80-120			
Thallium	211		1.00	ug/L	200		106	80-120			

Matrix Spike (2J15022-MS1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:21

Source: C210456-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	210		2.00	ug/L	200	0.220 U	105	75-125			
Selenium	224		1.00	ug/L	200	0.830 U	112	75-125			
Thallium	207		1.00	ug/L	200	0.139	103	75-125			

Matrix Spike Dup (2J15022-MSD1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:25

Source: C210456-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	207		2.00	ug/L	200	0.220 U	103	75-125	2	20	
Selenium	220		1.00	ug/L	200	0.830 U	110	75-125	2	20	
Thallium	200		1.00	ug/L	200	0.139	100	75-125	3	20	

Post Spike (2J15022-PS1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:29

Source: C210456-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	212		2.00	ug/L	200	0.0562	106	80-120			
Selenium	228		1.00	ug/L	200	-0.133	114	80-120			
Thallium	209		1.00	ug/L	200	0.139	105	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J15022 - EPA 3005A

Classical Chemistry Parameters - Quality Control

Batch 2J11029 - NO PREP

Blank (2J11029-BLK1)

Prepared: 10/12/2012 12:02 Analyzed: 10/12/2012 12:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO ₃	12000	U	15000	ug/L							

LCS (2J11029-BS1)

Prepared: 10/12/2012 12:03 Analyzed: 10/12/2012 12:03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO ₃	110000		15000	ug/L	100000		110	80-120			

Matrix Spike (2J11029-MS1)

Prepared: 10/12/2012 12:05 Analyzed: 10/12/2012 12:05

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO ₃	76000		15000	ug/L	37800	34000	111	80-120			

Matrix Spike Dup (2J11029-MSD1)

Prepared: 10/12/2012 12:06 Analyzed: 10/12/2012 12:06

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO ₃	74000		15000	ug/L	37800	34000	106	80-120	2	25	

Batch 2J12003 - NO PREP

Blank (2J12003-BLK1)

Prepared & Analyzed: 10/12/2012 10:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	10000	U	10000	ug/L							

LCS (2J12003-BS1)

Prepared & Analyzed: 10/12/2012 10:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	1000		10	mg/L	1000		100	90-110			

Duplicate (2J12003-DUP1)

Prepared & Analyzed: 10/12/2012 10:05

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	100000		10000	ug/L		100000			2	10	

Batch 2J17021 - NO PREP

Blank (2J17021-BLK1)

Prepared & Analyzed: 10/18/2012 10:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2J17021 - NO PREP

Blank (2J17021-BLK1) Continued

Prepared & Analyzed: 10/18/2012 10:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	1500	J	5000	ug/L							
Sulfate as SO4	40	U	5000	ug/L							

LCS (2J17021-BS1)

Prepared & Analyzed: 10/18/2012 10:51

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	49000	B	5000	ug/L	50000		97	90-110			
Sulfate as SO4	47000		5000	ug/L	50000		93	90-110			

Matrix Spike (2J17021-MS1)

Prepared & Analyzed: 10/18/2012 11:06

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	21000	B	5000	ug/L	20000	3300	89	90-110			QM-05
Sulfate as SO4	20000		5000	ug/L	20000	3400	85	90-110			QM-05

Matrix Spike Dup (2J17021-MSD1)

Prepared & Analyzed: 10/18/2012 11:22

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	22000	B	5000	ug/L	20000	3300	92	90-110	2	10	
Sulfate as SO4	21000		5000	ug/L	20000	3400	88	90-110	2	10	QM-05

FLAGS/NOTES AND DEFINITIONS

- B The analyte was detected in the associated method blank.
- D The sample was analyzed at dilution.
- J The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
- U The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
- MRL Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
- J-01 Result is estimated due to positive results in the associated method blank.
- QB-01 The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.



ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

1075 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945
4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

www.encolabs.com

102-A Woodwinds Industrial Ct.
Carroll NC 27151
(919) 467-3090 Fax (919) 467-3515

Page 1 of 1

Client Name S&ME, Inc. (SM002)	Project Number 1356-07-004	Requested Analyses										Requested Turnaround Times
Address 9751 Southern Pine Blvd.	Project Name/Desc. Lincoln County LF - C&D											Note: Rush requests subject to acceptance by the facility
City/ST/Zip Charlotte, NC 28273	PO # / Billing Info 50341											<input checked="" type="checkbox"/> Standard
Tel (704) 523-4726	Fax (704) 525-3953											<input type="checkbox"/> Expedited
Sample(s) Name, Affiliation (P/F/M) Beth Murphy, Barbara Ellington												Due <u>/ /</u>
Sample(s) Signature Beth Murphy, Barbara Ellington												Lab Workorder C210456
Preservation (See Codes) (Combine as necessary)												
Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Sample Comments					
5503-MW26		10/01/12	1130	5	GW	5	X	X	X	X	X	
5503-MW27			1140	6	GW	5	X	X	X	X	X	
5503-MW28			1150	6	GW	5	X	X	X	X	X	
5503-MW29			1050	6	GW	5	X	X	X	X	X	
5503-MW30			1100	6	GW	5	X	X	X	X	X	
5503-MW31			110	6	GW	5	X	X	X	X	X	
5503-TripBlank					WA	2	X					
<- Total # of Containers 32												

Sample Kit Prepared By JK	Date/Time 9-11	Received By Brian Winkler	Date/Time 10/01/12 1530
Comments/Special Reporting Requirements		Received By James Stampler	
Relinquished By		Date/Time 10/01/12 1530	
Relinquished By		Date/Time Received By	
Cooler #'s & Temps on Receipt C-765		Condition Upon Receipt 1.0°C	
		Condition Upon Receipt Acceptable	
		Condition Upon Receipt Unacceptable	

Preservation: H-Hc: H-HCl N-HC03 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



www.encolabs.com

Thursday, October 25, 2012

S&ME, Inc. (SM002)

Attn: Courtney Murphy

9751 Southern Pine Blvd.

Charlotte, NC 28273

RE: Laboratory Results for

Project Number: 1356-07-004, Project Name/Desc: Lincoln County LF - Surface Waters

ENCO Workorder(s): C210458

Dear Courtney Murphy,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, October 11, 2012.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith".

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID:	5503-SW1	Lab ID:	C210458-01	Sampled:	10/10/12 11:20	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:48
EPA 6020A		04/08/13		10/11/12	10:34	10/15/2012	10:52
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:38
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	12:04

Client ID:	5503-SW2	Lab ID:	C210458-02	Sampled:	10/10/12 09:05	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:50
EPA 6020A		04/08/13		10/11/12	10:34	10/15/2012	10:56
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:41
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	12:34

Client ID:	5503-SW4	Lab ID:	C210458-03	Sampled:	10/10/12 13:10	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:53
EPA 6020A		04/08/13		10/11/12	10:34	10/15/2012	11:00
EPA 7470A		11/07/12		10/15/12	10:58	10/15/2012	18:43
EPA 8260B		10/24/12		10/18/12	09:43	10/19/2012	13:04

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID: 5503-SW1		Lab ID: C210458-01								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Antimony - Total		0.278	J	1	0.220	2.00	6	ug/L	EPA 6020A	
Barium - Total		16.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Bromodichloromethane		1.2		1	0.17	1.0	1	ug/L	EPA 8260B	
Chloroform		1.2	J	1	0.18	1.0	5	ug/L	EPA 8260B	
Dibromochloromethane		1.3	J	1	0.17	1.0	3	ug/L	EPA 8260B	
Iron - Total		455		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total		37.6	JB	1	1.10	10.0	50	ug/L	EPA 6010C	QB-01
Vanadium - Total		1.63	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total		8.54	J	1	3.80	10.0	10	ug/L	EPA 6010C	

Client ID: 5503-SW2		Lab ID: C210458-02								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total		5.69	J	1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total		21.4	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Iron - Total		495		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total		15.4	JB	1	1.10	10.0	50	ug/L	EPA 6010C	J-01
Vanadium - Total		1.72	J	1	1.40	10.0	25	ug/L	EPA 6010C	

Client ID: 5503-SW4		Lab ID: C210458-03								
Analyte		Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Barium - Total		30.7	J	1	1.00	10.0	100	ug/L	EPA 6010C	
Iron - Total		366		1	22.0	50.0	300	ug/L	EPA 6010C	
Manganese - Total		27.4	JB	1	1.10	10.0	50	ug/L	EPA 6010C	QB-01
Thallium - Total		0.256	J	1	0.110	1.00	5.5	ug/L	EPA 6020A	

ANALYTICAL RESULTS

Description: 5503-SW1

Lab Sample ID: C210458-01

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 11:20

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 12:04	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 12:04	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 12:04	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 12:04	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 12:04	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 12:04	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 12:04	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 12:04	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 12:04	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 12:04	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 12:04	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 12:04	JKG	
Bromodichloromethane [75-27-4] ^	1.2		ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 12:04	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 12:04	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 12:04	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 12:04	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 12:04	JKG	
Chloroform [67-66-3] ^	1.2	J	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 12:04	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 12:04	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Dibromochloromethane [124-48-1] ^	1.3	J	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 12:04	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 12:04	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 12:04	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 12:04	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 12:04	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 12:04	JKG	

Description: 5503-SW1

Lab Sample ID: C210458-01

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 11:20

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 12:04	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 12:04	JKG	
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 12:04	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	46	1	50.0	92 %	51-122		ZJ18014	EPA 8260B	10/19/12 12:04	JKG	
Dibromofluoromethane	56	1	50.0	113 %	68-117		ZJ18014	EPA 8260B	10/19/12 12:04	JKG	
Toluene-d8	47	1	50.0	94 %	67-127		ZJ18014	EPA 8260B	10/19/12 12:04	JKG	

Description: 5503-SW1**Lab Sample ID:** C210458-01**Received:** 10/11/12 09:02**Matrix:** Surface Water**Sampled:** 10/10/12 11:20**Work Order:** C210458**Project:** Lincoln County LF - Surface Waters**Sampled By:** Brian Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:38	T1D	

Description: 5503-SW1

Lab Sample ID: C210458-01

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 11:20

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.278	J	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 10:52	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:48	JDH	
Barium [7440-39-3] ^	16.7	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:48	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:48	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:48	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:48	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:48	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:48	JDH	
Iron [7439-89-6] ^	455		ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:48	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:48	JDH	
Manganese [7439-96-5] ^	37.6	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:48	JDH	QB-01
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:48	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 10:52	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:48	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 10:52	VLO	
Vanadium [7440-62-2] ^	1.63	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:48	JDH	
Zinc [7440-66-6] ^	8.54	J	ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:48	JDH	

Description: 5503-SW2

Lab Sample ID: C210458-02

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 09:05

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 12:34	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 12:34	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 12:34	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 12:34	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 12:34	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 12:34	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 12:34	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 12:34	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 12:34	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 12:34	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 12:34	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 12:34	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 12:34	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 12:34	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 12:34	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 12:34	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 12:34	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 12:34	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 12:34	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 12:34	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 12:34	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 12:34	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 12:34	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 12:34	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 12:34	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 12:34	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 12:34	JKG	

Description: 5503-SW2

Lab Sample ID: C210458-02

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 09:05

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 12:34	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	89 %	51-122		2J18014	EPA 8260B	10/19/12 12:34	JKG	
Dibromofluoromethane	53	1	50.0	105 %	68-117		2J18014	EPA 8260B	10/19/12 12:34	JKG	
Toluene-d8	45	1	50.0	90 %	67-127		2J18014	EPA 8260B	10/19/12 12:34	JKG	

Description: 5503-SW2**Lab Sample ID:** C210458-02**Received:** 10/11/12 09:02**Matrix:** Surface Water**Sampled:** 10/10/12 09:05**Work Order:** C210458**Project:** Lincoln County LF - Surface Waters**Sampled By:** Brian Wilson**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:41	T1D	

Description: 5503-SW2

Lab Sample ID: C210458-02

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 09:05

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 10:56	VLO	
Arsenic [7440-38-2] ^	5.69	J	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:50	JDH	
Barium [7440-39-3] ^	21.4	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:50	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:50	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:50	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:50	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:50	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:50	JDH	
Iron [7439-89-6] ^	495		ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:50	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:50	JDH	
Manganese [7439-96-5] ^	15.4	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:50	JDH	J-01
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:50	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 10:56	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:50	JDH	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 10:56	VLO	
Vanadium [7440-62-2] ^	1.72	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:50	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:50	JDH	

Description: 5503-SW4

Lab Sample ID: C210458-03

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 13:10

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/19/12 13:04	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/19/12 13:04	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/19/12 13:04	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 13:04	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/19/12 13:04	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/19/12 13:04	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/19/12 13:04	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/19/12 13:04	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/19/12 13:04	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/19/12 13:04	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/19/12 13:04	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/19/12 13:04	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/19/12 13:04	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/19/12 13:04	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/19/12 13:04	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 13:04	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/19/12 13:04	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/19/12 13:04	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/19/12 13:04	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/19/12 13:04	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/19/12 13:04	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/19/12 13:04	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/19/12 13:04	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/19/12 13:04	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/19/12 13:04	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/19/12 13:04	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/19/12 13:04	JKG	

Description: 5503-SW4

Lab Sample ID: C210458-03

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 13:10

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/19/12 13:04	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	44	1	50.0	88 %	51-122		2J18014	EPA 8260B	10/19/12 13:04	JKG	
Dibromofluoromethane	49	1	50.0	98 %	68-117		2J18014	EPA 8260B	10/19/12 13:04	JKG	
Toluene-d8	44	1	50.0	87 %	67-127		2J18014	EPA 8260B	10/19/12 13:04	JKG	

Description: 5503-SW4**Lab Sample ID:** C210458-03**Received:** 10/11/12 09:02**Matrix:** Surface Water**Sampled:** 10/10/12 13:10**Work Order:** C210458**Project:** Lincoln County LF - Surface Waters**Sampled By:** Brian Wilson**Metals by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.170	U	ug/L	1	0.170	0.200	0.2	EPA 7470A	10/15/12 18:43	T1D	

Description: 5503-SW4

Lab Sample ID: C210458-03

Received: 10/11/12 09:02

Matrix: Surface Water

Sampled: 10/10/12 13:10

Work Order: C210458

Project: Lincoln County LF - Surface Waters

Sampled By: Brian Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods
[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	6	EPA 6020A	10/15/12 11:00	VLO	
Arsenic [7440-38-2] ^	2.80	U	ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:53	JDH	
Barium [7440-39-3] ^	30.7	J	ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:53	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:53	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:53	JDH	
Chromium [7440-47-3] ^	1.00	U	ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:53	JDH	
Cobalt [7440-48-4] ^	1.10	U	ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:53	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:53	JDH	
Iron [7439-89-6] ^	366		ug/L	1	22.0	50.0	300	EPA 6010C	10/16/12 12:53	JDH	
Lead [7439-92-1] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:53	JDH	
Manganese [7439-96-5] ^	27.4	JB	ug/L	1	1.10	10.0	50	EPA 6010C	10/16/12 12:53	JDH	QB-01
Nickel [7440-02-0] ^	1.80	U	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:53	JDH	
Selenium [7782-49-2] ^	0.830	U	ug/L	1	0.830	1.00	10	EPA 6020A	10/15/12 11:00	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:53	JDH	
Thallium [7440-28-0] ^	0.256	J	ug/L	1	0.110	1.00	5.5	EPA 6020A	10/15/12 11:00	VLO	
Vanadium [7440-62-2] ^	1.40	U	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:53	JDH	
Zinc [7440-66-6] ^	3.80	U	ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:53	JDH	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J18014 - EPA 5030B_MS

Blank (2J18014-BLK1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 05:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							

Surrogate: 4-Bromofluorobenzene

46

ug/L

50.0

92

51-122

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J18014 - EPA 5030B_MS

Blank (2J18014-BLK1) Continued

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 05:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	51			ug/L	50.0		103	68-117			
Surrogate: Toluene-d8	45			ug/L	50.0		90	67-127			

LCS (2J18014-BS1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 06:06

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0		116	75-133			
Benzene	21		1.0	ug/L	20.0		107	81-134			
Chlorobenzene	20		1.0	ug/L	20.0		99	83-117			
Toluene	22		1.0	ug/L	20.0		112	71-118			
Trichloroethene	21		1.0	ug/L	20.0		106	74-119			

Matrix Spike (2J18014-MS1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 06:35

Source: C212186-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	23		1.0	ug/L	20.0	0.21 U	114	75-133			
Benzene	21		1.0	ug/L	20.0	0.15 U	105	81-134			
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	97	83-117			
Toluene	22		1.0	ug/L	20.0	0.14 U	108	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	102	74-119			

Matrix Spike Dup (2J18014-MSD1)

Prepared: 10/18/2012 09:43 Analyzed: 10/19/2012 07:05

Source: C212186-09

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.21 U	112	75-133	1	20	
Benzene	20		1.0	ug/L	20.0	0.15 U	102	81-134	3	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.17 U	97	83-117	0.05	16	
Toluene	22		1.0	ug/L	20.0	0.14 U	108	71-118	0.2	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	102	74-119	0.1	22	

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 2J15024 - EPA 7470A

Blank (2J15024-BLK1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.170	U	0.200	ug/L							

LCS (2J15024-BS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.51		0.200	ug/L	5.00		90	80-120			

Matrix Spike (2J15024-MS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:09

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 2J15024 - EPA 7470A

Matrix Spike (2J15024-MS1) Continued

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:09

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.67		0.200	ug/L	5.00	0.170 U	93	75-125			

Matrix Spike Dup (2J15024-MSD1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:11

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.73		0.200	ug/L	5.00	0.170 U	95	75-125	1	25	

Post Spike (2J15024-PS1)

Prepared: 10/15/2012 10:58 Analyzed: 10/15/2012 18:13

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	4.03		0.200	ug/L	5.00	-0.0420	81	75-125			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J11015 - EPA 3005A

Blank (2J11015-BLK1)

Prepared: 10/11/2012 10:34 Analyzed: 10/15/2012 10:24

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (2J11015-BS1)

Prepared: 10/11/2012 10:34 Analyzed: 10/15/2012 10:28

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	202		2.00	ug/L	200		101	80-120			
Selenium	207		1.00	ug/L	200		103	80-120			
Thallium	202		1.00	ug/L	200		101	80-120			

Matrix Spike (2J11015-MS1)

Prepared: 10/11/2012 10:34 Analyzed: 10/15/2012 10:36

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	204		2.00	ug/L	200	0.484	102	75-125			
Selenium	219		1.00	ug/L	200	1.19	109	75-125			
Thallium	200		1.00	ug/L	200	0.110 U	100	75-125			

Matrix Spike Dup (2J11015-MSD1)

Prepared: 10/11/2012 10:34 Analyzed: 10/15/2012 10:40

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	207		2.00	ug/L	200	0.484	103	75-125	1	20	
Selenium	219		1.00	ug/L	200	1.19	109	75-125	0.2	20	

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J11015 - EPA 3005A

Matrix Spike Dup (2J11015-MSD1) Continued

Prepared: 10/11/2012 10:34 Analyzed: 10/15/2012 10:40

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Thallium	202		1.00	ug/L	200	0.110 U	101	75-125	1	20	

Post Spike (2J11015-PS1)

Prepared: 10/11/2012 10:34 Analyzed: 10/15/2012 10:44

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	208		2.00	ug/L	200	0.484	104	80-120			
Selenium	223		1.00	ug/L	200	1.19	111	80-120			
Thallium	202		1.00	ug/L	200	0.0788	101	80-120			

Batch 2J12014 - EPA 3005A

Blank (2J12014-BLK1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Iron	22.0	U	50.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Manganese	2.14	J	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (2J12014-BS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	198		10.0	ug/L	200		99	80-120			
Barium	205		10.0	ug/L	200		102	80-120			
Beryllium	19.9		1.00	ug/L	20.0		99	80-120			
Cadmium	20.8		1.00	ug/L	20.0		104	80-120			
Chromium	199		10.0	ug/L	200		99	80-120			
Cobalt	200		10.0	ug/L	200		100	80-120			
Copper	196		10.0	ug/L	200		98	80-120			
Iron	1020		50.0	ug/L	1000		102	80-120			
Lead	202		10.0	ug/L	200		101	80-120			
Manganese	201	B	10.0	ug/L	200		101	80-120			
Nickel	201		10.0	ug/L	200		101	80-120			
Silver	204		10.0	ug/L	200		102	80-120			
Vanadium	201		10.0	ug/L	200		101	80-120			
Zinc	206		10.0	ug/L	200		103	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Matrix Spike (2J12014-MS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:19

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	199		10.0	ug/L	200	2.80 U	99	75-125			
Barium	292		10.0	ug/L	200	91.6	100	75-125			
Beryllium	20.1		1.00	ug/L	20.0	0.100 U	101	75-125			
Cadmium	21.0		1.00	ug/L	20.0	0.360 U	105	75-125			
Chromium	203		10.0	ug/L	200	2.74	100	75-125			
Cobalt	203		10.0	ug/L	200	1.10 U	101	75-125			
Copper	200		10.0	ug/L	200	2.20	99	75-125			
Iron	1330		50.0	ug/L	1000	276	105	75-125			
Lead	200		10.0	ug/L	200	1.90 U	100	75-125			
Manganese	208	B	10.0	ug/L	200	7.82	100	75-125			
Nickel	204		10.0	ug/L	200	1.80 U	102	75-125			
Silver	202		10.0	ug/L	200	1.90 U	101	75-125			
Vanadium	203		10.0	ug/L	200	1.40 U	102	75-125			
Zinc	214		10.0	ug/L	200	12.8	100	75-125			

Matrix Spike Dup (2J12014-MSD1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:21

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	198		10.0	ug/L	200	2.80 U	99	75-125	0.2	20	
Barium	299		10.0	ug/L	200	91.6	103	75-125	2	20	
Beryllium	20.5		1.00	ug/L	20.0	0.100 U	102	75-125	2	20	
Cadmium	21.1		1.00	ug/L	20.0	0.360 U	105	75-125	0.3	20	
Chromium	207		10.0	ug/L	200	2.74	102	75-125	2	20	
Cobalt	204		10.0	ug/L	200	1.10 U	102	75-125	0.7	20	
Copper	203		10.0	ug/L	200	2.20	100	75-125	2	20	
Iron	1340		50.0	ug/L	1000	276	106	75-125	1	20	
Lead	203		10.0	ug/L	200	1.90 U	101	75-125	1	20	
Manganese	212	B	10.0	ug/L	200	7.82	102	75-125	2	20	
Nickel	207		10.0	ug/L	200	1.80 U	104	75-125	2	20	
Silver	207		10.0	ug/L	200	1.90 U	104	75-125	2	20	
Vanadium	207		10.0	ug/L	200	1.40 U	103	75-125	2	20	
Zinc	219		10.0	ug/L	200	12.8	103	75-125	2	20	

Post Spike (2J12014-PS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:23

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.189		0.0100	mg/L	0.200	0.00143	94	80-120			
Barium	0.285		0.0100	mg/L	0.200	0.0916	97	80-120			
Beryllium	0.0197		0.00100	mg/L	0.0200	6.60E-5	98	80-120			
Cadmium	0.0201		0.00100	mg/L	0.0200	6.62E-6	101	80-120			
Chromium	0.198		0.0100	mg/L	0.200	0.00274	98	80-120			
Cobalt	0.195		0.0100	mg/L	0.200	0.000335	97	80-120			
Copper	0.194		0.0100	mg/L	0.200	0.00220	96	80-120			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Post Spike (2J12014-PS1) Continued

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:23

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	1.28		0.0500	mg/L	1.00	0.276	100	80-120			
Lead	0.194		0.0100	mg/L	0.200	0.000340	97	80-120			
Manganese	0.203	B	0.0100	mg/L	0.200	0.00782	98	80-120			
Nickel	0.200		0.0100	mg/L	0.200	0.00176	99	80-120			
Silver	0.203		0.0100	mg/L	0.200	-9.92E-5	102	80-120			
Vanadium	0.198		0.0100	mg/L	0.200	0.00114	99	80-120			
Zinc	0.211		0.0100	mg/L	0.200	0.0128	99	80-120			

FLAGS/NOTES AND DEFINITIONS

- B The analyte was detected in the associated method blank.
- D The sample was analyzed at dilution.
- J The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
- U The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
- MRL Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
- J-01 Result is estimated due to positive results in the associated method blank.
- QB-01 The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD


10775 Central Park Dr.
Orlando, FL 32824
(407) 926-5314 Fax (407) 850-6945
4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3515

www.encolabs.com

Client Name S&ME, Inc. (SM002)		Project Number 1356-07-004		Project Name/Desc Lincoln County LF - Surface Waters		PO # / Billing Info 50341		Reporting Contact Courtney Murphy		Billing Contact Barbara Ellington		Site Location / Time Zone Q		Preservation (See Codes) (Combine as necessary) Ag,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,Vzn		Requested Analyses		Requested Turnaround Times	
Address 9751 Southern Pine Blvd.		City/Zip Charlotte, NC 28273		Tel (704) 523-4726		Fax (704) 525-3953		Sample Point / Affiliation (Point) Wilson Shire		Sample Point / Affiliation (Point) E. Hill		Preservation (See Codes) (Combine as necessary) Ag,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,Vzn		Preservation (See Codes) (Combine as necessary) Ag,As,Ba,Be,Cd,Cr,Cu,Fe,Mn,Ni,Pb,Sb,Se,Tl,Vzn		Note - Rush requests subject to acceptance by the facility			
Comments / Special Requirements Sample Signature - 																			
Sample Kit Prepared By MES		Date/time 9/11/12		Received By J. Miller		Date/time 9/11/12		Reinquisitioned By J. Miller		Date/time 9/11/12		Reinstituted By J. Miller		Date/time 9/11/12		Condition Upon Receipt 1.70C		Unacceptable	
Comments / Special Reporting Requirements Comments/Special Reporting Requirements																			
Cooler #'s & Temps on Receipt																			
Total # of Containers 12																			
Reinstituted By J. Miller		Date/time 9/11/12		Received By J. Miller		Date/time 9/11/12		Reinstitution By J. Miller		Date/time 9/11/12		Received By J. Miller		Date/time 9/11/12		Condition Upon Receipt 1.70C		Unacceptable	
Comments / Special Requirements Comments/Special Reporting Requirements																			
Preservation: H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)																			
Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist																			

Environmental Conservation Laboratories, Inc.

102-A Woodwinds Industrial Court

Cary NC, 27511

Phone: 919.467.3090 FAX: 919.467.3515



www.encolabs.com

Thursday, October 25, 2012

S&ME, Inc. (SM002)

Attn: Courtney Murphy

9751 Southern Pine Blvd.

Charlotte, NC 28273

RE: Laboratory Results for

Project Number: 1356-07-004, Project Name/Desc: Lincoln County LF - Leachate

ENCO Workorder(s): C210457

Dear Courtney Murphy,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, October 11, 2012.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Chuck Smith".

Chuck Smith

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID:	5503-Lift Station	Lab ID:	C210457-01	Sampled:	10/10/12 09:15	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 300.0		11/07/12		10/18/12	13:41	10/18/2012	13:41
EPA 310.2		10/24/12		10/12/12	10:46	10/12/2012	10:46
EPA 353.2		10/12/12 09:15		10/11/12	14:52	10/11/2012	15:44
EPA 353.2		11/07/12		10/16/12	10:58	10/16/2012	11:52
EPA 353.2		07/06/15		10/19/12	11:49	10/21/2012	10:39
EPA 365.4		11/07/12		10/17/12	15:30	10/18/2012	12:08
EPA 6010C		04/08/13		10/12/12	10:14	10/16/2012	12:45
EPA 6020A		04/08/13		10/15/12	10:48	10/16/2012	12:05
SM 2540D		10/17/12		10/12/12	16:10	10/12/2012	16:10
SM 5210B		10/12/12 09:15		10/11/12	14:46	10/11/2012	14:46
SM 5220D		11/07/12		10/12/12	12:47	10/12/2012	15:54

Client ID:	5503-Lift Station	Lab ID:	C210457-01RE1	Sampled:	10/10/12 09:15	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		10/24/12		10/22/12	09:13	10/22/2012	20:16

Client ID:	5503-Trip Blank	Lab ID:	C210457-02RE1	Sampled:	10/10/12 09:15	Received:	10/11/12 09:02
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		10/24/12		10/22/12	09:13	10/22/2012	20:45

NORTH CAROLINA SWS SAMPLE DETECTION SUMMARY

Client ID:	Lab ID: C210457-01								
Analyte	Results	Flag	DF	MDL	MRL	NC SWSL	Units	Method	Notes
Arsenic - Total	118		1	2.80	10.0	10	ug/L	EPA 6010C	
Barium - Total	573		1	1.00	10.0	100	ug/L	EPA 6010C	
Biochemical Oxygen Demand	56000		1	2000	2000	NE	ug/L	SM 5210B	B-07
Chemical Oxygen Demand	440000		1	10000	10000	NE	ug/L	SM 5220D	
Chromium - Total	18.2		1	1.00	10.0	10	ug/L	EPA 6010C	
Cobalt - Total	15.3		1	1.10	10.0	10	ug/L	EPA 6010C	
Lead - Total	2.29	J	1	1.90	10.0	10	ug/L	EPA 6010C	
Nickel - Total	40.7	J	1	1.80	10.0	50	ug/L	EPA 6010C	
Nitrate as N	40	J	1	25	100	10000	ug/L	EPA 353.2	
Nitrate/Nitrite as N	170		1	25	100	NE	ug/L	EPA 353.2	
Nitrite as N	130	JB	1	3.0	100	1000	ug/L	EPA 353.2	QB-01
Phosphorus	1000		1	24	100	NE	ug/L	EPA 365.4	
Sulfate as SO4	6200	J	1	40	5000	250000	ug/L	EPA 300.0	
Total Alkalinity as CaCO3	1400000	D	20	240000	300000	NE	ug/L	EPA 310.2	
Total Suspended Solids	150000		1	1000	1000	NE	ug/L	SM 2540D	
Vanadium - Total	12.8	J	1	1.40	10.0	25	ug/L	EPA 6010C	
Zinc - Total	57.5		1	3.80	10.0	10	ug/L	EPA 6010C	

ANALYTICAL RESULTS

Description: 5503-Lift Station

Lab Sample ID: C210457-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 09:15

Work Order: C210457

Project: Lincoln County LF - Leachate

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	1.7	UD	ug/L	10	1.7	10	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,1,1-Trichloroethane [71-55-6] ^	1.2	UD	ug/L	10	1.2	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,1,2,2-Tetrachloroethane [79-34-5] ^	2.8	UD	ug/L	10	2.8	10	3	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,1,2-Trichloroethane [79-00-5] ^	1.4	UD	ug/L	10	1.4	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,1-Dichloroethane [75-34-3] ^	1.3	UD	ug/L	10	1.3	10	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,1-Dichloroethene [75-35-4] ^	2.1	UD	ug/L	10	2.1	10	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,2,3-Trichloropropane [96-18-4] ^	2.3	UD	ug/L	10	2.3	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,2-Dibromo-3-chloropropane [96-12-8] ^	4.8	UD	ug/L	10	4.8	10	13	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,2-Dibromoethane [106-93-4] ^	6.6	UD	ug/L	10	6.6	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,2-Dichlorobenzene [95-50-1] ^	1.9	UD	ug/L	10	1.9	10	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,2-Dichloroethane [107-06-2] ^	2.1	UD	ug/L	10	2.1	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,2-Dichloropropane [78-87-5] ^	1.0	UD	ug/L	10	1.0	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
1,4-Dichlorobenzene [106-46-7] ^	1.9	UD	ug/L	10	1.9	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
2-Butanone [78-93-3] ^	13	UD	ug/L	10	13	50	100	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
2-Hexanone [591-78-6] ^	8.8	UD	ug/L	10	8.8	50	50	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
4-Methyl-2-pentanone [108-10-1] ^	11	UD	ug/L	10	11	50	100	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Acetone [67-64-1] ^	12	UD	ug/L	10	12	50	100	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Acrylonitrile [107-13-1] ^	35	UD	ug/L	10	35	100	200	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Benzene [71-43-2] ^	1.5	UD	ug/L	10	1.5	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Bromochloromethane [74-97-5] ^	4.8	UD	ug/L	10	4.8	10	3	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Bromodichloromethane [75-27-4] ^	1.7	UD	ug/L	10	1.7	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Bromoform [75-25-2] ^	2.2	UD	ug/L	10	2.2	10	3	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Bromomethane [74-83-9] ^	1.4	UD	ug/L	10	1.4	10	10	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Carbon disulfide [75-15-0] ^	15	UD	ug/L	10	15	50	100	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Carbon tetrachloride [56-23-5] ^	1.7	UD	ug/L	10	1.7	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Chlorobenzene [108-90-7] ^	1.7	UD	ug/L	10	1.7	10	3	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Chloroethane [75-00-3] ^	2.3	UD	ug/L	10	2.3	10	10	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Chloroform [67-66-3] ^	1.8	UD	ug/L	10	1.8	10	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Chloromethane [74-87-3] ^	1.3	UD	ug/L	10	1.3	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
cis-1,2-Dichloroethene [156-59-2] ^	1.5	UD	ug/L	10	1.5	10	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
cis-1,3-Dichloropropene [10061-01-5] ^	2.0	UD	ug/L	10	2.0	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Dibromochloromethane [124-48-1] ^	1.7	UD	ug/L	10	1.7	10	3	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Dibromomethane [74-95-3] ^	2.7	UD	ug/L	10	2.7	10	10	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Ethylbenzene [100-41-4] ^	1.3	UD	ug/L	10	1.3	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Iodomethane [74-88-4] ^	17	UD	ug/L	10	17	50	10	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Methylene chloride [75-09-2] ^	2.3	UD	ug/L	10	2.3	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Styrene [100-42-5] ^	1.1	UD	ug/L	10	1.1	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Tetrachloroethene [127-18-4] ^	1.7	UD	ug/L	10	1.7	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Toluene [108-88-3] ^	1.4	UD	ug/L	10	1.4	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
trans-1,2-Dichloroethene [156-60-5] ^	2.1	UD	ug/L	10	2.1	10	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
trans-1,3-Dichloropropene [10061-02-6] ^	1.5	UD	ug/L	10	1.5	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
trans-1,4-Dichloro-2-butene [110-57-6] ^	7.0	UD	ug/L	10	7.0	10	100	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Trichloroethene [79-01-6] ^	1.5	UD	ug/L	10	1.5	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04

Description: 5503-Lift Station

Lab Sample ID: C210457-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 09:15

Work Order: C210457

Project: Lincoln County LF - Leachate

Sampled By: Brian E. Wilson

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Trichlorofluoromethane [75-69-4] ^	2.4	UD	ug/L	10	2.4	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Vinyl acetate [108-05-4] ^	9.5	UD	ug/L	10	9.5	50	50	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Vinyl chloride [75-01-4] ^	3.2	UD	ug/L	10	3.2	10	1	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Xylenes (Total) [1330-20-7] ^	4.5	UD	ug/L	10	4.5	30	5	EPA 8260B	10/22/12 20:16	JKG	PH, R-04
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	45	1	50.0	90 %	51-122	ZJ19007	EPA 8260B	10/22/12 20:16	JKG	PH, R-04	
Dibromofluoromethane	43	1	50.0	86 %	68-117	ZJ19007	EPA 8260B	10/22/12 20:16	JKG	PH, R-04	
Toluene-d8	43	1	50.0	85 %	67-127	ZJ19007	EPA 8260B	10/22/12 20:16	JKG	PH, R-04	

Description: 5503-Lift Station

Lab Sample ID: C210457-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 09:15

Work Order: C210457

Project: Lincoln County LF - Leachate

Sampled By: Brian E. Wilson

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	2.20	UD	ug/L	10	2.20	20.0	6	EPA 6020A	10/16/12 12:05	VLO	
Arsenic [7440-38-2] ^	118		ug/L	1	2.80	10.0	10	EPA 6010C	10/16/12 12:45	JDH	
Barium [7440-39-3] ^	573		ug/L	1	1.00	10.0	100	EPA 6010C	10/16/12 12:45	JDH	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1	EPA 6010C	10/16/12 12:45	JDH	
Cadmium [7440-43-9] ^	0.360	U	ug/L	1	0.360	1.00	1	EPA 6010C	10/16/12 12:45	JDH	
Chromium [7440-47-3] ^	18.2		ug/L	1	1.00	10.0	10	EPA 6010C	10/16/12 12:45	JDH	
Cobalt [7440-48-4] ^	15.3		ug/L	1	1.10	10.0	10	EPA 6010C	10/16/12 12:45	JDH	
Copper [7440-50-8] ^	1.60	U	ug/L	1	1.60	10.0	10	EPA 6010C	10/16/12 12:45	JDH	
Lead [7439-92-1] ^	2.29	J	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:45	JDH	
Nickel [7440-02-0] ^	40.7	J	ug/L	1	1.80	10.0	50	EPA 6010C	10/16/12 12:45	JDH	
Selenium [7782-49-2] ^	8.30	UD	ug/L	10	8.30	10.0	10	EPA 6020A	10/16/12 12:05	VLO	
Silver [7440-22-4] ^	1.90	U	ug/L	1	1.90	10.0	10	EPA 6010C	10/16/12 12:45	JDH	
Thallium [7440-28-0] ^	1.10	UD	ug/L	10	1.10	10.0	5.5	EPA 6020A	10/16/12 12:05	VLO	
Vanadium [7440-62-2] ^	12.8	J	ug/L	1	1.40	10.0	25	EPA 6010C	10/16/12 12:45	JDH	
Zinc [7440-66-6] ^	57.5		ug/L	1	3.80	10.0	10	EPA 6010C	10/16/12 12:45	JDH	

Description: 5503-Lift Station

Lab Sample ID: C210457-01

Received: 10/11/12 09:02

Matrix: Ground Water

Sampled: 10/10/12 09:15

Work Order: C210457

Project: Lincoln County LF - Leachate

Sampled By: Brian E. Wilson

Classical Chemistry Parameters

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Biochemical Oxygen Demand [ECL-0017] ^	56000		ug/L	1	2000	2000	NE	SM 5210B	10/11/12 14:46	JOC	B-07
Chemical Oxygen Demand [ECL-0035] ^	440000		ug/L	1	10000	10000	NE	SM 5220D	10/12/12 15:54	JOC	
Nitrate as N [14797-55-8] ^	40	J	ug/L	1	25	100	10000	EPA 353.2	10/21/12 10:39	AJB	
Nitrate/Nitrite as N [ECL-0010] ^	170		ug/L	1	25	100	NE	EPA 353.2	10/16/12 11:52	AJB	
Nitrite as N [14797-65-0] ^	130	JB	ug/L	1	3.0	100	1000	EPA 353.2	10/11/12 15:44	AJB	QB-01
Phosphorus [7723-14-0] ^	1000		ug/L	1	24	100	NE	EPA 365.4	10/18/12 12:08	AJB	
Sulfate as SO4 [14808-79-8] ^	6200	J	ug/L	1	40	5000	250000	EPA 300.0	10/18/12 13:41	AJB	
Total Alkalinity as CaCO3 [471-34-1] ^	1400000	D	ug/L	20	240000	300000	NE	EPA 310.2	10/12/12 10:46	AJB	
Total Suspended Solids [ECL-0169] ^	150000		ug/L	1	1000	1000	NE	SM 2540D	10/12/12 16:10	JCS	

Description: 5503-Trip Blank

Lab Sample ID: C210457-02

Received: 10/11/12 09:02

Matrix: Water

Sampled: 10/10/12 09:15

Work Order: C210457

Project: Lincoln County LF - Leachate

Sampled By: ENCO

Volatile Organic Compounds by GCMS

[^] - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.17	U	ug/L	1	0.17	1.0	5	EPA 8260B	10/22/12 20:45	JKG	
1,1,1-Trichloroethane [71-55-6] ^	0.12	U	ug/L	1	0.12	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.28	U	ug/L	1	0.28	1.0	3	EPA 8260B	10/22/12 20:45	JKG	
1,1,2-Trichloroethane [79-00-5] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
1,1-Dichloroethane [75-34-3] ^	0.13	U	ug/L	1	0.13	1.0	5	EPA 8260B	10/22/12 20:45	JKG	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/22/12 20:45	JKG	
1,2,3-Trichloropropane [96-18-4] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.48	U	ug/L	1	0.48	1.0	13	EPA 8260B	10/22/12 20:45	JKG	
1,2-Dibromoethane [106-93-4] ^	0.66	U	ug/L	1	0.66	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
1,2-Dichlorobenzene [95-50-1] ^	0.19	U	ug/L	1	0.19	1.0	5	EPA 8260B	10/22/12 20:45	JKG	
1,2-Dichloroethane [107-06-2] ^	0.21	U	ug/L	1	0.21	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
1,2-Dichloropropane [78-87-5] ^	0.10	U	ug/L	1	0.10	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
1,4-Dichlorobenzene [106-46-7] ^	0.19	U	ug/L	1	0.19	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
2-Butanone [78-93-3] ^	1.3	U	ug/L	1	1.3	5.0	100	EPA 8260B	10/22/12 20:45	JKG	
2-Hexanone [591-78-6] ^	0.88	U	ug/L	1	0.88	5.0	50	EPA 8260B	10/22/12 20:45	JKG	
4-Methyl-2-pentanone [108-10-1] ^	1.1	U	ug/L	1	1.1	5.0	100	EPA 8260B	10/22/12 20:45	JKG	
Acetone [67-64-1] ^	1.2	U	ug/L	1	1.2	5.0	100	EPA 8260B	10/22/12 20:45	JKG	
Acrylonitrile [107-13-1] ^	3.5	U	ug/L	1	3.5	10	200	EPA 8260B	10/22/12 20:45	JKG	
Benzene [71-43-2] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Bromochloromethane [74-97-5] ^	0.48	U	ug/L	1	0.48	1.0	3	EPA 8260B	10/22/12 20:45	JKG	
Bromodichloromethane [75-27-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Bromoform [75-25-2] ^	0.22	U	ug/L	1	0.22	1.0	3	EPA 8260B	10/22/12 20:45	JKG	
Bromomethane [74-83-9] ^	0.14	U	ug/L	1	0.14	1.0	10	EPA 8260B	10/22/12 20:45	JKG	
Carbon disulfide [75-15-0] ^	1.5	U	ug/L	1	1.5	5.0	100	EPA 8260B	10/22/12 20:45	JKG	
Carbon tetrachloride [56-23-5] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Chlorobenzene [108-90-7] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/22/12 20:45	JKG	
Chloroethane [75-00-3] ^	0.23	U	ug/L	1	0.23	1.0	10	EPA 8260B	10/22/12 20:45	JKG	
Chloroform [67-66-3] ^	0.18	U	ug/L	1	0.18	1.0	5	EPA 8260B	10/22/12 20:45	JKG	
Chloromethane [74-87-3] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
cis-1,2-Dichloroethene [156-59-2] ^	0.15	U	ug/L	1	0.15	1.0	5	EPA 8260B	10/22/12 20:45	JKG	
cis-1,3-Dichloropropene [10061-01-5] ^	0.20	U	ug/L	1	0.20	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Dibromochloromethane [124-48-1] ^	0.17	U	ug/L	1	0.17	1.0	3	EPA 8260B	10/22/12 20:45	JKG	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	10	EPA 8260B	10/22/12 20:45	JKG	
Ethylbenzene [100-41-4] ^	0.13	U	ug/L	1	0.13	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Iodomethane [74-88-4] ^	1.7	U	ug/L	1	1.7	5.0	10	EPA 8260B	10/22/12 20:45	JKG	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Styrene [100-42-5] ^	0.11	U	ug/L	1	0.11	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Tetrachloroethene [127-18-4] ^	0.17	U	ug/L	1	0.17	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Toluene [108-88-3] ^	0.14	U	ug/L	1	0.14	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
trans-1,2-Dichloroethene [156-60-5] ^	0.21	U	ug/L	1	0.21	1.0	5	EPA 8260B	10/22/12 20:45	JKG	
trans-1,3-Dichloropropene [10061-02-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
trans-1,4-Dichloro-2-butene [110-57-6] ^	0.70	U	ug/L	1	0.70	1.0	100	EPA 8260B	10/22/12 20:45	JKG	
Trichloroethene [79-01-6] ^	0.15	U	ug/L	1	0.15	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Trichlorofluoromethane [75-69-4] ^	0.24	U	ug/L	1	0.24	1.0	1	EPA 8260B	10/22/12 20:45	JKG	
Vinyl acetate [108-05-4] ^	0.95	U	ug/L	1	0.95	5.0	50	EPA 8260B	10/22/12 20:45	JKG	
Vinyl chloride [75-01-4] ^	0.32	U	ug/L	1	0.32	1.0	1	EPA 8260B	10/22/12 20:45	JKG	

Description: 5503-Trip Blank

Lab Sample ID: C210457-02

Received: 10/11/12 09:02

Matrix: Water

Sampled: 10/10/12 09:15

Work Order: C210457

Project: Lincoln County LF - Leachate

Sampled By: ENCO

Volatile Organic Compounds by GCMS

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	NC SWSL	Method	Analyzed	By	Notes
Xylenes (Total) [1330-20-7] ^	0.45	U	ug/L	1	0.45	3.0	5	EPA 8260B	10/22/12 20:45	JKG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	90 %	51-122		ZJ19007	EPA 8260B	10/22/12 20:45	JKG	
Dibromofluoromethane	44	1	50.0	88 %	68-117		ZJ19007	EPA 8260B	10/22/12 20:45	JKG	
Toluene-d8	42	1	50.0	84 %	67-127		ZJ19007	EPA 8260B	10/22/12 20:45	JKG	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J19007 - EPA 5030B_MS

Blank (2J19007-BLK1)

Prepared: 10/19/2012 09:13 Analyzed: 10/22/2012 14:21

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.17	U	1.0	ug/L							
1,1,1-Trichloroethane	0.12	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.28	U	1.0	ug/L							
1,1,2-Trichloroethane	0.14	U	1.0	ug/L							
1,1-Dichloroethane	0.13	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,2,3-Trichloropropane	0.23	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.48	U	1.0	ug/L							
1,2-Dibromoethane	0.66	U	1.0	ug/L							
1,2-Dichlorobenzene	0.19	U	1.0	ug/L							
1,2-Dichloroethane	0.21	U	1.0	ug/L							
1,2-Dichloropropane	0.10	U	1.0	ug/L							
1,4-Dichlorobenzene	0.19	U	1.0	ug/L							
2-Butanone	1.3	U	5.0	ug/L							
2-Hexanone	0.88	U	5.0	ug/L							
4-Methyl-2-pentanone	1.1	U	5.0	ug/L							
Acetone	1.2	U	5.0	ug/L							
Acrylonitrile	3.5	U	10	ug/L							
Benzene	0.15	U	1.0	ug/L							
Bromochloromethane	0.48	U	1.0	ug/L							
Bromodichloromethane	0.17	U	1.0	ug/L							
Bromoform	0.22	U	1.0	ug/L							
Bromomethane	0.14	U	1.0	ug/L							
Carbon disulfide	1.5	U	5.0	ug/L							
Carbon tetrachloride	0.17	U	1.0	ug/L							
Chlorobenzene	0.17	U	1.0	ug/L							
Chloroethane	0.23	U	1.0	ug/L							
Chloroform	0.18	U	1.0	ug/L							
Chloromethane	0.13	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.15	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.20	U	1.0	ug/L							
Dibromochloromethane	0.17	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Ethylbenzene	0.13	U	1.0	ug/L							
Iodomethane	1.7	U	5.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Styrene	0.11	U	1.0	ug/L							
Tetrachloroethene	0.17	U	1.0	ug/L							
Toluene	0.14	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.21	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.15	U	1.0	ug/L							
trans-1,4-Dichloro-2-butene	0.70	U	1.0	ug/L							
Trichloroethene	0.15	U	1.0	ug/L							
Trichlorofluoromethane	0.24	U	1.0	ug/L							
Vinyl acetate	0.95	U	5.0	ug/L							
Vinyl chloride	0.32	U	1.0	ug/L							
Xylenes (Total)	0.45	U	3.0	ug/L							

Surrogate: 4-Bromofluorobenzene

47

ug/L

50.0

93

51-122

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 2J19007 - EPA 5030B_MS

Blank (2J19007-BLK1) Continued

Prepared: 10/19/2012 09:13 Analyzed: 10/22/2012 14:21

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	45			ug/L	50.0		90	68-117			
Surrogate: Toluene-d8	42			ug/L	50.0		84	67-127			

LCS (2J19007-BS1)

Prepared: 10/19/2012 09:13 Analyzed: 10/22/2012 14:51

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0		101	75-133			
Benzene	18		1.0	ug/L	20.0		90	81-134			
Chlorobenzene	21		1.0	ug/L	20.0		103	83-117			
Toluene	21		1.0	ug/L	20.0		106	71-118			
Trichloroethene	20		1.0	ug/L	20.0		98	74-119			

Matrix Spike (2J19007-MS1)

Prepared: 10/19/2012 09:13 Analyzed: 10/22/2012 15:20

Source: C212478-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.21 U	103	75-133			
Benzene	18		1.0	ug/L	20.0	0.15 U	92	81-134			
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	100	83-117			
Toluene	22		1.0	ug/L	20.0	0.14 U	110	71-118			
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	100	74-119			

Matrix Spike Dup (2J19007-MSD1)

Prepared: 10/19/2012 09:13 Analyzed: 10/22/2012 15:50

Source: C212478-04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.21 U	98	75-133	5	20	
Benzene	18		1.0	ug/L	20.0	0.15 U	90	81-134	3	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.17 U	99	83-117	1	16	
Toluene	21		1.0	ug/L	20.0	0.14 U	104	71-118	6	17	
Trichloroethene	20		1.0	ug/L	20.0	0.15 U	100	74-119	1	22	

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Blank (2J12014-BLK1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.80	U	10.0	ug/L							
Barium	1.00	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.360	U	1.00	ug/L							
Chromium	1.00	U	10.0	ug/L							
Cobalt	1.10	U	10.0	ug/L							
Copper	1.60	U	10.0	ug/L							
Lead	1.90	U	10.0	ug/L							
Nickel	1.80	U	10.0	ug/L							

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Blank (2J12014-BLK1) Continued

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Silver	1.90	U	10.0	ug/L							
Vanadium	1.40	U	10.0	ug/L							
Zinc	3.80	U	10.0	ug/L							

LCS (2J12014-BS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:14

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	198		10.0	ug/L	200		99	80-120			
Barium	205		10.0	ug/L	200		102	80-120			
Beryllium	19.9		1.00	ug/L	20.0		99	80-120			
Cadmium	20.8		1.00	ug/L	20.0		104	80-120			
Chromium	199		10.0	ug/L	200		99	80-120			
Cobalt	200		10.0	ug/L	200		100	80-120			
Copper	196		10.0	ug/L	200		98	80-120			
Lead	202		10.0	ug/L	200		101	80-120			
Nickel	201		10.0	ug/L	200		101	80-120			
Silver	204		10.0	ug/L	200		102	80-120			
Vanadium	201		10.0	ug/L	200		101	80-120			
Zinc	206		10.0	ug/L	200		103	80-120			

Matrix Spike (2J12014-MS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:19

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	199		10.0	ug/L	200	2.80 U	99	75-125			
Barium	292		10.0	ug/L	200	91.6	100	75-125			
Beryllium	20.1		1.00	ug/L	20.0	0.100 U	101	75-125			
Cadmium	21.0		1.00	ug/L	20.0	0.360 U	105	75-125			
Chromium	203		10.0	ug/L	200	2.74	100	75-125			
Cobalt	203		10.0	ug/L	200	1.10 U	101	75-125			
Copper	200		10.0	ug/L	200	2.20	99	75-125			
Lead	200		10.0	ug/L	200	1.90 U	100	75-125			
Nickel	204		10.0	ug/L	200	1.80 U	102	75-125			
Silver	202		10.0	ug/L	200	1.90 U	101	75-125			
Vanadium	203		10.0	ug/L	200	1.40 U	102	75-125			
Zinc	214		10.0	ug/L	200	12.8	100	75-125			

Matrix Spike Dup (2J12014-MSD1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:21

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	198		10.0	ug/L	200	2.80 U	99	75-125	0.2	20	
Barium	299		10.0	ug/L	200	91.6	103	75-125	2	20	
Beryllium	20.5		1.00	ug/L	20.0	0.100 U	102	75-125	2	20	
Cadmium	21.1		1.00	ug/L	20.0	0.360 U	105	75-125	0.3	20	
Chromium	207		10.0	ug/L	200	2.74	102	75-125	2	20	
Cobalt	204		10.0	ug/L	200	1.10 U	102	75-125	0.7	20	

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J12014 - EPA 3005A

Matrix Spike Dup (2J12014-MSD1) Continued

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:21

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Copper	203		10.0	ug/L	200	2.20	100	75-125	2	20	
Lead	203		10.0	ug/L	200	1.90 U	101	75-125	1	20	
Nickel	207		10.0	ug/L	200	1.80 U	104	75-125	2	20	
Silver	207		10.0	ug/L	200	1.90 U	104	75-125	2	20	
Vanadium	207		10.0	ug/L	200	1.40 U	103	75-125	2	20	
Zinc	219		10.0	ug/L	200	12.8	103	75-125	2	20	

Post Spike (2J12014-PS1)

Prepared: 10/12/2012 10:14 Analyzed: 10/16/2012 12:23

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.189		0.0100	mg/L	0.200	0.00143	94	80-120			
Barium	0.285		0.0100	mg/L	0.200	0.0916	97	80-120			
Beryllium	0.0197		0.00100	mg/L	0.0200	6.60E-5	98	80-120			
Cadmium	0.0201		0.00100	mg/L	0.0200	6.62E-6	101	80-120			
Chromium	0.198		0.0100	mg/L	0.200	0.00274	98	80-120			
Cobalt	0.195		0.0100	mg/L	0.200	0.000335	97	80-120			
Copper	0.194		0.0100	mg/L	0.200	0.00220	96	80-120			
Lead	0.194		0.0100	mg/L	0.200	0.000340	97	80-120			
Nickel	0.200		0.0100	mg/L	0.200	0.00176	99	80-120			
Silver	0.203		0.0100	mg/L	0.200	-9.92E-5	102	80-120			
Vanadium	0.198		0.0100	mg/L	0.200	0.00114	99	80-120			
Zinc	0.211		0.0100	mg/L	0.200	0.0128	99	80-120			

Batch 2J15022 - EPA 3005A

Blank (2J15022-BLK1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Selenium	0.830	U	1.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

LCS (2J15022-BS1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	205		2.00	ug/L	200		103	80-120			
Selenium	221		1.00	ug/L	200		110	80-120			
Thallium	211		1.00	ug/L	200		106	80-120			

Matrix Spike (2J15022-MS1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:21

Source: C210456-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	210		2.00	ug/L	200	0.220 U	105	75-125			
Selenium	224		1.00	ug/L	200	0.830 U	112	75-125			

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 2J15022 - EPA 3005A

Matrix Spike (2J15022-MS1) Continued

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:21

Source: C210456-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Thallium	207		1.00	ug/L	200	0.139	103	75-125			

Matrix Spike Dup (2J15022-MSD1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:25

Source: C210456-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	207		2.00	ug/L	200	0.220 U	103	75-125	2	20	
Selenium	220		1.00	ug/L	200	0.830 U	110	75-125	2	20	
Thallium	200		1.00	ug/L	200	0.139	100	75-125	3	20	

Post Spike (2J15022-PS1)

Prepared: 10/15/2012 10:48 Analyzed: 10/16/2012 11:29

Source: C210456-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	212		2.00	ug/L	200	0.0562	106	80-120			
Selenium	228		1.00	ug/L	200	-0.133	114	80-120			
Thallium	209		1.00	ug/L	200	0.139	105	80-120			

Classical Chemistry Parameters - Quality Control

Batch 2J11016 - NO PREP

Blank (2J11016-BLK1)

Prepared & Analyzed: 10/11/2012 14:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	2000	U	2000	ug/L							

LCS (2J11016-BS1)

Prepared & Analyzed: 10/11/2012 14:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	170000		2000	ug/L	198000		84	85-115			B-07

Duplicate (2J11016-DUP1)

Prepared & Analyzed: 10/11/2012 14:46

Source: C210457-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Biochemical Oxygen Demand	56000		2000	ug/L		56000			0.5	25	B-07

Batch 2J11026 - NO PREP

Blank (2J11026-BLK1)

Prepared: 10/11/2012 14:52 Analyzed: 10/11/2012 15:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	6.3	J	100	ug/L							

LCS (2J11026-BS1)

Prepared: 10/11/2012 14:52 Analyzed: 10/11/2012 15:17

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2J11026 - NO PREP

LCS (2J11026-BS1) Continued

Prepared: 10/11/2012 14:52 Analyzed: 10/11/2012 15:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1000	B	100	ug/L	1000		102	90-110			

Matrix Spike (2J11026-MS1)

Prepared: 10/11/2012 14:52 Analyzed: 10/11/2012 16:31

Source: C210457-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1100	B	100	ug/L	1000	130	95	90-110			

Matrix Spike Dup (2J11026-MSD1)

Prepared: 10/11/2012 14:52 Analyzed: 10/11/2012 16:32

Source: C210457-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrite as N	1100	B	100	ug/L	1000	130	96	90-110	2	10	

Batch 2J11028 - NO PREP

Blank (2J11028-BLK1)

Prepared: 10/12/2012 10:41 Analyzed: 10/12/2012 10:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	12000	U	15000	ug/L							

LCS (2J11028-BS1)

Prepared: 10/12/2012 10:42 Analyzed: 10/12/2012 10:42

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	98000		15000	ug/L	100000		98	80-120			

Matrix Spike (2J11028-MS1)

Prepared: 10/12/2012 10:44 Analyzed: 10/12/2012 10:44

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	36000		15000	ug/L	37800	12000 U	96	80-120			

Matrix Spike Dup (2J11028-MSD1)

Prepared: 10/12/2012 10:45 Analyzed: 10/12/2012 10:45

Source: C211677-03

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Alkalinity as CaCO3	35000		15000	ug/L	37800	12000 U	93	80-120	3	25	

Batch 2J12021 - Same

Blank (2J12021-BLK1)

Prepared: 10/12/2012 12:47 Analyzed: 10/12/2012 15:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	10000	U	10000	ug/L							

LCS (2J12021-BS1)

Prepared: 10/12/2012 12:47 Analyzed: 10/12/2012 15:54

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2J12021 - Same

LCS (2J12021-BS1) Continued

Prepared: 10/12/2012 12:47 Analyzed: 10/12/2012 15:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	510000		10000	ug/L	500000		102	90-110			

Matrix Spike (2J12021-MS1)

Prepared: 10/12/2012 12:47 Analyzed: 10/12/2012 15:54

Source: C210324-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	620000		10000	ug/L	500000	110000	102	90-110			

Matrix Spike Dup (2J12021-MSD1)

Prepared: 10/12/2012 12:47 Analyzed: 10/12/2012 15:54

Source: C210324-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chemical Oxygen Demand	610000		10000	ug/L	500000	110000	101	90-110	1	10	

Batch 2J12033 - NO PREP

Blank (2J12033-BLK1)

Prepared & Analyzed: 10/12/2012 16:10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Suspended Solids	1000	U	1000	ug/L							

LCS (2J12033-BS1)

Prepared & Analyzed: 10/12/2012 16:10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Suspended Solids	91		1.0	mg/L	100		91	90-122			

Duplicate (2J12033-DUP1)

Prepared & Analyzed: 10/12/2012 16:10

Source: C203172-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Suspended Solids	9200		1000	ug/L		9600			4	25	

Batch 2J14006 - Same

Blank (2J14006-BLK1)

Prepared: 10/17/2012 15:30 Analyzed: 10/18/2012 11:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	24	U	100	ug/L							

LCS (2J14006-BS1)

Prepared: 10/17/2012 15:30 Analyzed: 10/18/2012 11:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	1600		100	ug/L	1600		99	80-120			

Matrix Spike (2J14006-MS1)

Prepared: 10/17/2012 15:30 Analyzed: 10/18/2012 11:53

Source: C203172-01

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 2J14006 - Same

Matrix Spike (2J14006-MS1) Continued

Prepared: 10/17/2012 15:30 Analyzed: 10/18/2012 11:53

Source: C203172-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	2000		100	ug/L	640	1300	94	80-120			

Matrix Spike Dup (2J14006-MSD1)

Prepared: 10/17/2012 15:30 Analyzed: 10/18/2012 11:54

Source: C203172-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Phosphorus	2000		100	ug/L	640	1300	101	80-120	2	25	

Batch 2J15028 - NO PREP

Blank (2J15028-BLK1)

Prepared: 10/15/2012 11:39 Analyzed: 10/16/2012 11:47

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	25	U	100	ug/L							

LCS (2J15028-BS1)

Prepared: 10/15/2012 11:39 Analyzed: 10/16/2012 11:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	1100		100	ug/L	1250		90	90-110			

Matrix Spike (2J15028-MS1)

Prepared: 10/15/2012 11:39 Analyzed: 10/16/2012 11:54

Source: C210457-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	700		100	ug/L	513	170	103	90-110			

Matrix Spike Dup (2J15028-MSD1)

Prepared: 10/15/2012 11:39 Analyzed: 10/16/2012 11:56

Source: C210457-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nitrate/Nitrite as N	730		100	ug/L	513	170	110	90-110	5	10	

Batch 2J17021 - NO PREP

Blank (2J17021-BLK1)

Prepared & Analyzed: 10/18/2012 10:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	40	U	5000	ug/L							

LCS (2J17021-BS1)

Prepared & Analyzed: 10/18/2012 10:51

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	47000		5000	ug/L	50000		93	90-110			

Matrix Spike (2J17021-MS1)

Prepared & Analyzed: 10/18/2012 11:06

QUALITY CONTROL**Classical Chemistry Parameters - Quality Control**

Batch 2J17021 - NO PREP

Matrix Spike (2J17021-MS1) Continued

Prepared & Analyzed: 10/18/2012 11:06

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	20000		5000	ug/L	20000	3400	85	90-110			QM-05

Matrix Spike Dup (2J17021-MSD1)

Prepared & Analyzed: 10/18/2012 11:22

Source: C210456-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sulfate as SO4	21000		5000	ug/L	20000	3400	88	90-110	2	10	QM-05

FLAGS/NOTES AND DEFINITIONS

- B The analyte was detected in the associated method blank.
- D The sample was analyzed at dilution.
- J The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
- U The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
- MRL Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
- B-07 LCS exceeded control limits for this test. The test can not be repeated due to method constraints. The result should be considered an estimated value.
- PH Insufficient preservative to reduce the sample pH to less than 2. Sample was analyzed within 14 days of sampling, but beyond the 7 days recommended for Benzene, Toluene, and Ethylbenzene.
- QB-01 The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact of the deviation.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- R-04 The Reporting Limits for this analysis are elevated due to sample foaming.

APPENDIX II
STATISTICAL ANALYSIS PROCEDURE SHEETS

Parametric ANOVA

See Also:

[Parametric t-test](#)
[Satterthwaite t-test](#)

Description:

The one-way parametric Analysis of Variance (Parametric ANOVA) is useful for compliance to background (inter-well) comparisons.

The 1989 guidance recommends that for p wells (where $p \geq 2$), there be at least 3 observations for each well and that the total sample size N is large enough that $N-p \geq 5$. With fewer samples, the ability to detect contamination will be reduced.

The 1992 guidance recommends that there be fewer than 15% non-detects for the parametric ANOVA.

ChemStat performs the parametric ANOVA on all background and compliance well data for a parameter. Individual comparisons for each well are then performed.

Use:

For inter-well comparisons.

Remarks:

The 1992 USEPA Statistical Guidance incorrectly states, and many authors have incorrectly stated, that data must be normally distributed and have equal well variance for the parametric ANOVA to be appropriate. The USEPA 1989 Statistical Guidance correctly states that the *residuals* must be normally distributed for the parametric ANOVA to be appropriate. Shapiro-Wilks method, Shapiro-Francia method, D'Agostino's method, and probability plots are methods included in ChemStat to test the normality of the residuals. The USEPA 1992 Statistical Guidance correctly states that normality is required for the parametric prediction limit and the parametric tolerance limit.

Kruskal-Wallis Non-Parametric Analysis

Other Non-Parametric Tests:

[Wilcoxon Intra-Well Comparison](#)

[Wilcoxon Inter-Well Comparison](#)

[Non-Parametric Prediction Limits](#)

[Non-Parametric Tolerance Limits](#)

Description:

The Kruskal-Wallis test is a non-parametric Analysis of variance that compares each compliance well to a group of background wells. It is recommended in the 1992 guidance document for data that do not follow a normal distribution, or have 15% to 90% non-detects.

ChemStat compares each compliance well to the background wells. Two comparisons are provided. The first comparison is performed at a minimum of 1% individual well comparison error level. The second comparison is performed at an experimentwise 5% error level, however the minimum error level may fall below the USEPA required value of 1%. The first comparison is compliant with USEPA guidance. The second comparison is less likely to produce false positives, but is more statistically accurate.

All wells should have at least 4 samples. The test will work with fewer samples, but it is not likely to show statistical significance.

Use:

For comparison of compliance wells to background wells when data do not follow a normal distribution, or there are 15% to 90% non-detects.

Remarks:

The Kruskal-Wallis test can only determine which compliance well is elevated with respect to background, but can not determine which specific samples cause the statistical trigger.

The 1992 guidance example problem for the Kruskal-Wallis method has an error. On page 43, the rank sum and rank mean for Well 3 are given as 51 and 10 respectively. The rank sum and rank mean should be 61 and 12.2 respectively.

Non-Parametric Prediction Limit

See Also:

[Recent Dates](#)

[Verification Resampling](#)

[Well List View](#)

[Parametric Prediction Limit](#)

[Poisson Prediction Limit](#)

[Non-Parametric Tolerance Limit](#)

The Non-Parametric Prediction Limit can be used as an inter-well comparison, where the prediction limit is calculated from samples from background wells, or an intra-well comparison where the prediction limit is calculated from the historical samples from the selected well.

Intra-well or Inter-well comparisons are selected from **Select | Comparison**, or from the Prediction Limit right-click menu.

Inter-Well Comparison:

[Verification Resampling](#)

To support verification resampling, ChemStat allows you to vary the number of samples compared to the prediction limit for each well. The default number of recent sampling dates is specified from [Options | Default Options | Comparison](#) or the prediction limit right-click menu. In most cases, a value of 1 is appropriate. However, you can specify different "recent date" values for each individual well. When the prediction interval report is displayed, the bottom portion of the window will display a list of all compliance wells included in the analysis. Select a well or wells. Click the right mouse button to display the context menu, and select the desired number of recent dates for the selected well(s).

Description:

The inter-well non-parametric prediction limit is recommended in the 1992 guidance for data where the assumptions of normality or transformed-normality can not be justified, or when a significant portion of the samples are non-detects. A very basic test, the non-parametric prediction limit simply compares each individual down-gradient concentration for the selected dates, to the maximum concentration in background samples. The prediction limit does not produce an actual limit, but simply a maximum value of the parameter concentration above which contamination is assumed.

The only mathematical calculation is to determine the coverage or level of significance of the test. The level of coverage is dependent on the number of background samples and the selected number of recent dates to compare to the limit.

The inter-well non-parametric prediction limit compares samples from background wells to a selected number of recent sampling dates from compliance wells. If there are more than one sample per date, the samples for that date are averaged. The number of recent sampling dates is specified in the list of wells in the lower pane of the prediction limit menu. In most cases, a value of 1 is appropriate.

Use:

As an inter-well comparison, the non parametric prediction limit is useful for comparison of individual compliance well samples to pooled background data where data do not follow a normal or transformed-normal distribution, and/or there is an abundance of non-detects.

The test is performed on all compliance wells for the specified parameter.

Remarks:

This method will tend to have a high rate of false negatives unless there is a sufficient number of samples available from background wells. The method is not well documented for use on actual data in the 1992 guidance. For this reason, and because of the lack of power of the method, it should be used only when other methods are not available.

Intra-Well Comparison:

Description:

Although not described in the USEPA guidance documents, non-parametric prediction intervals can be used for an intra-well comparison. The Intra-Well Non-Parametric Prediction Limit compares a selected number of recent samples to a specified number of historical baseline samples from the same well.

The only significant calculation is to determine the coverage or level of significance of the test. The level of coverage is dependent on the number of historical samples and the selected number of recent dates.

Use:

As an intra-well comparison, the non parametric prediction limit is useful for assessing potential contamination in a well without the possibility of false positives resulting from natural variability of the ground water quality.

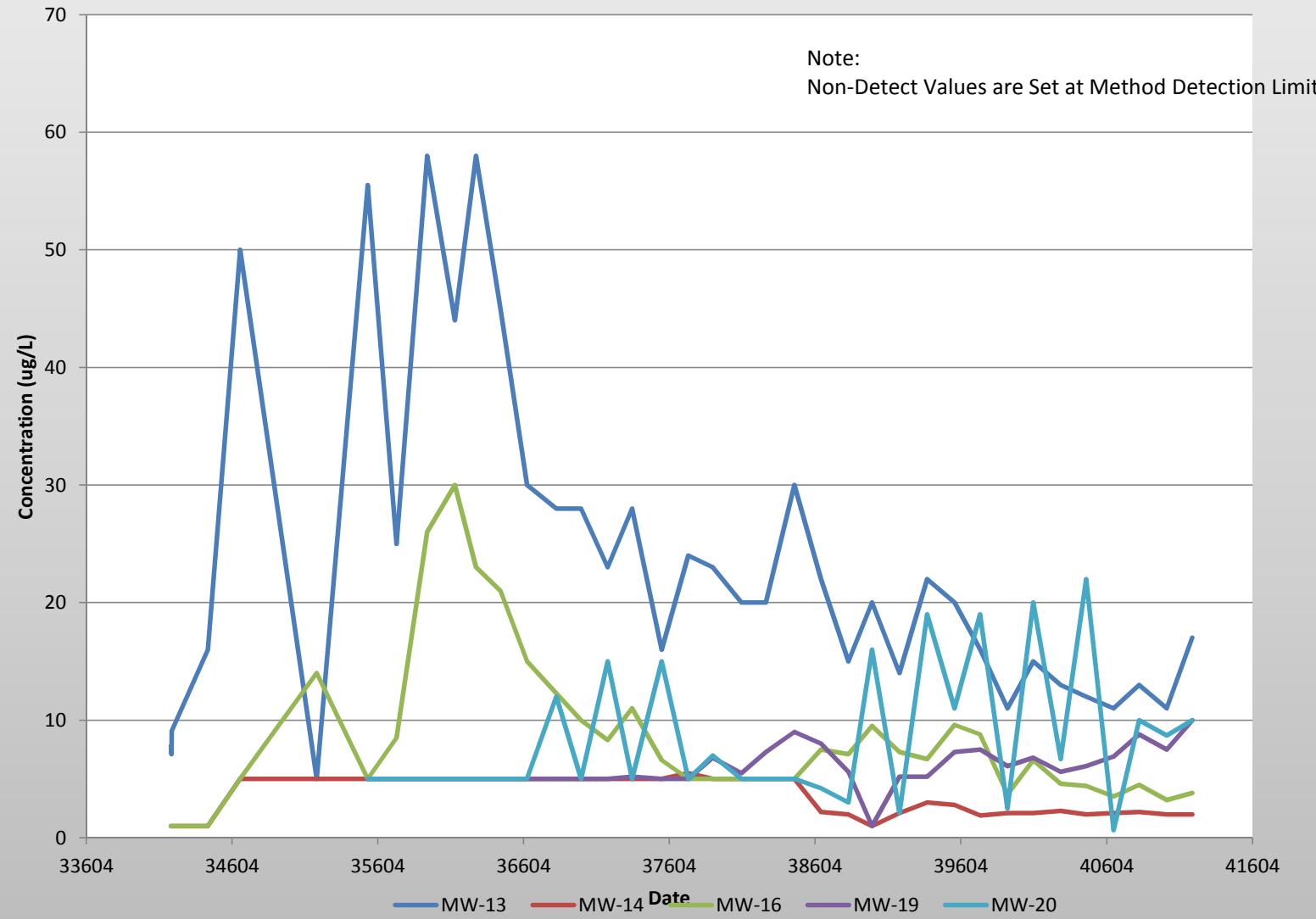
Remarks:

Although easy to implement, as an intra-well comparison, this method requires a large number of historical samples to achieve a reasonable statistical power. To achieve a 95% confidence level, approximately 20 historical samples (known not to be impacted by the facility) are required for each future sample to be compared. It would be unusual to have a facility with this large number of samples, and not be able to apply some other analysis method.

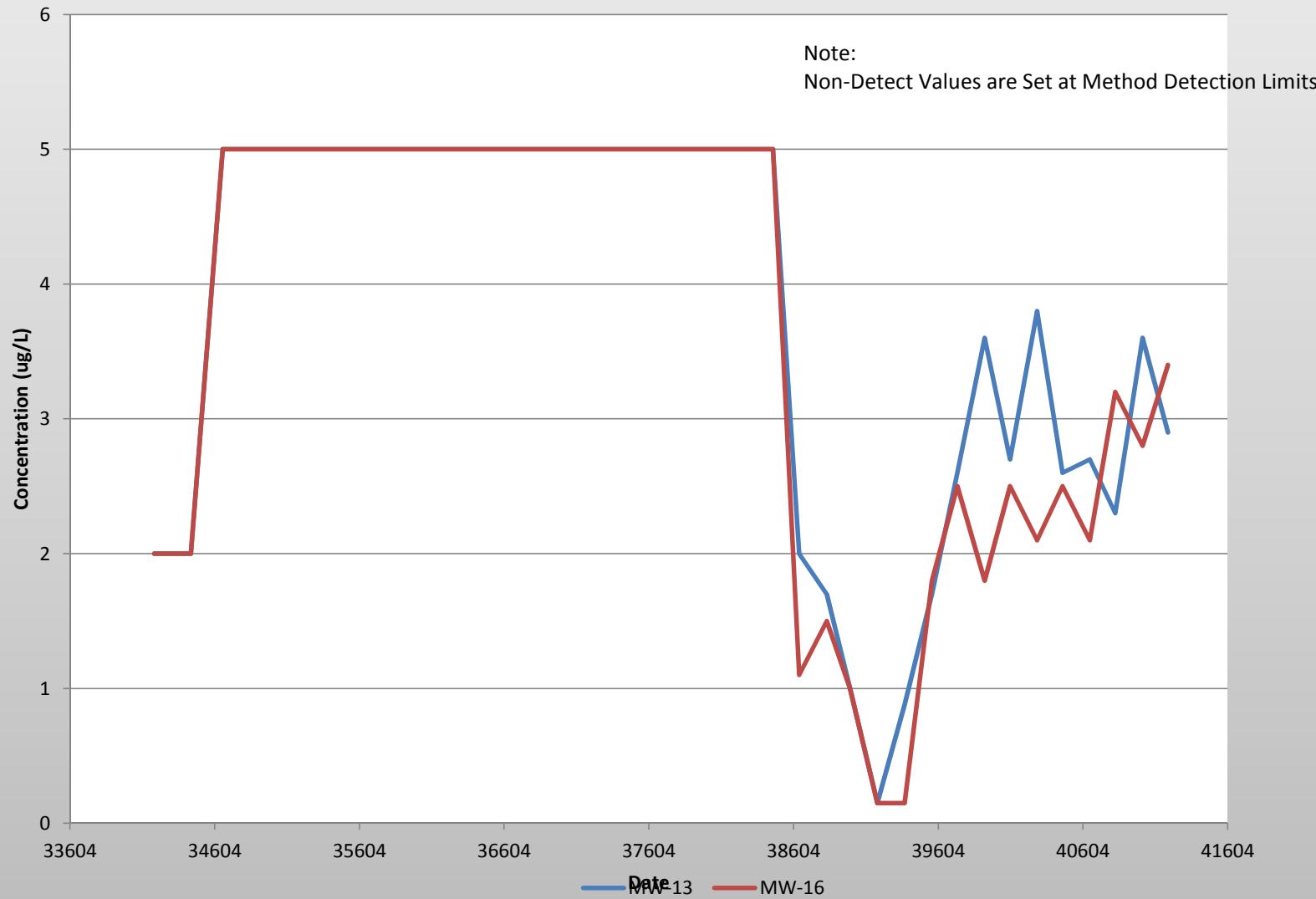
The method is not well documented for use on actual data in the 1992 guidance. For this reason, and because of the lack of power of the method, it should be used only when other methods are not available.

APPENDIX III
GRAPHS DEPICTING CONCENTRATIONS OVER TIME
FOR WELLS WITH AN SSI

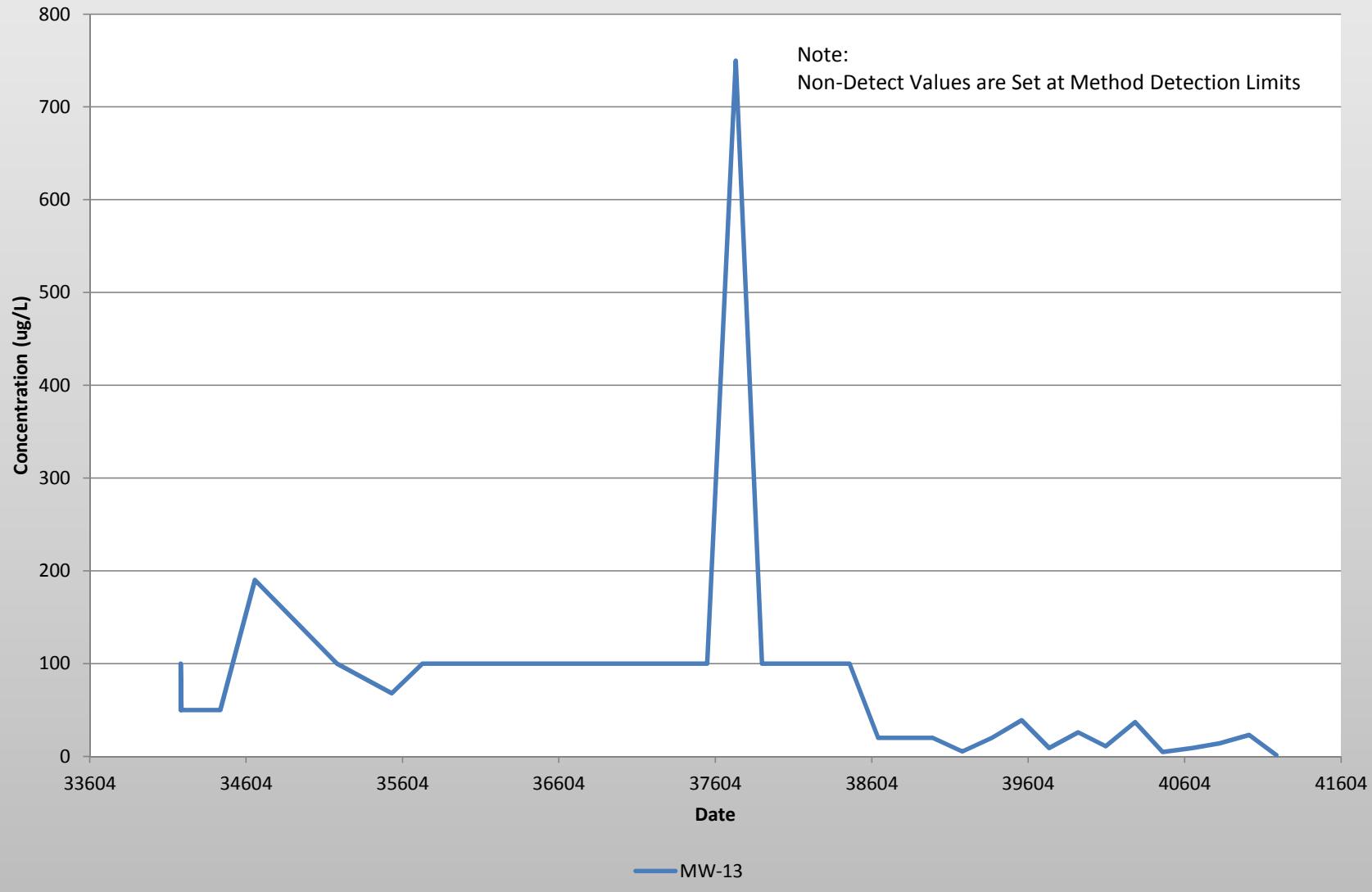
1,1 - Dichloroethane Phase 1 and Area "E" Wells With SSI



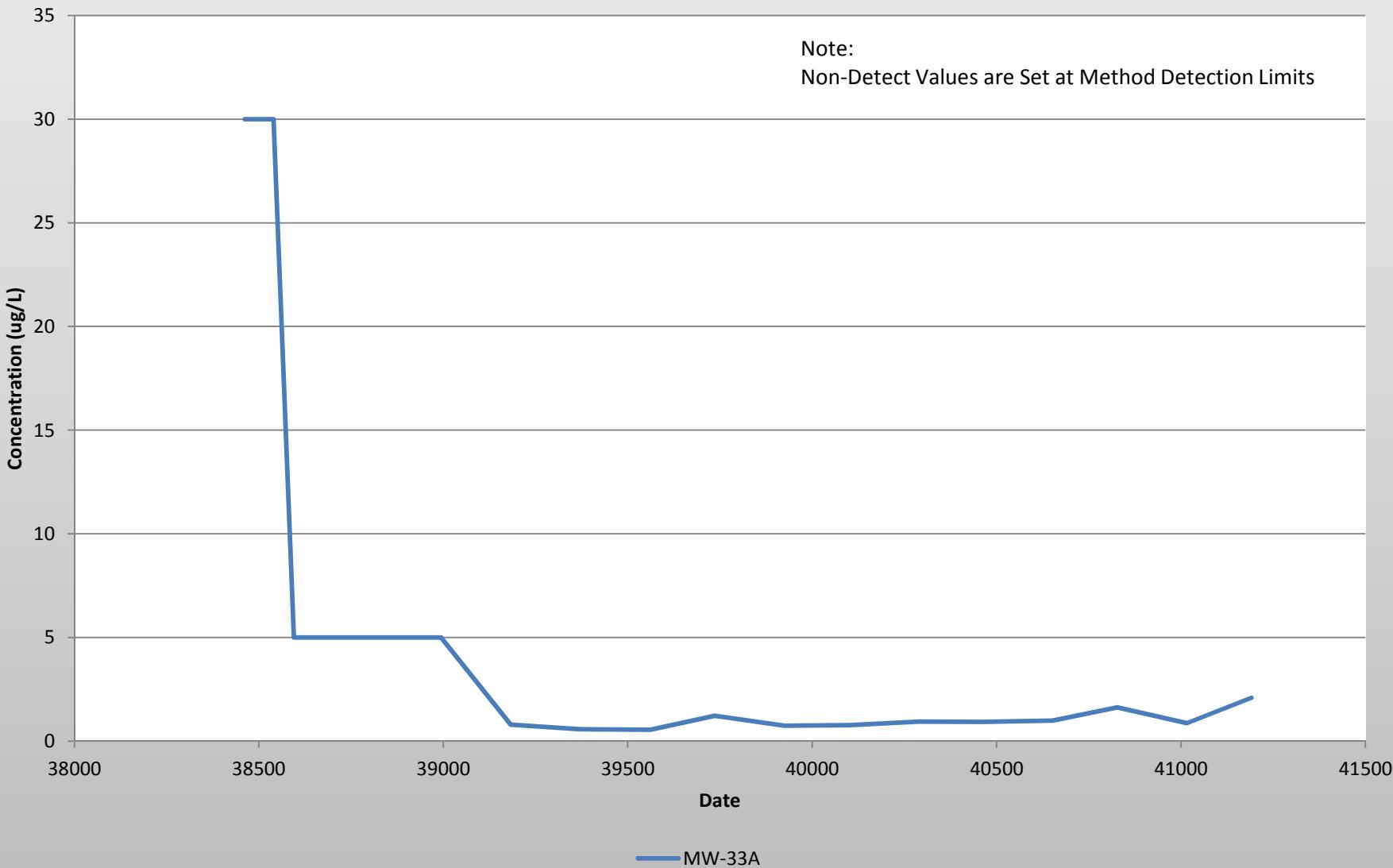
1,4 - Dichlorobenzene
Phase 1 and Area "E" Wells With SSI



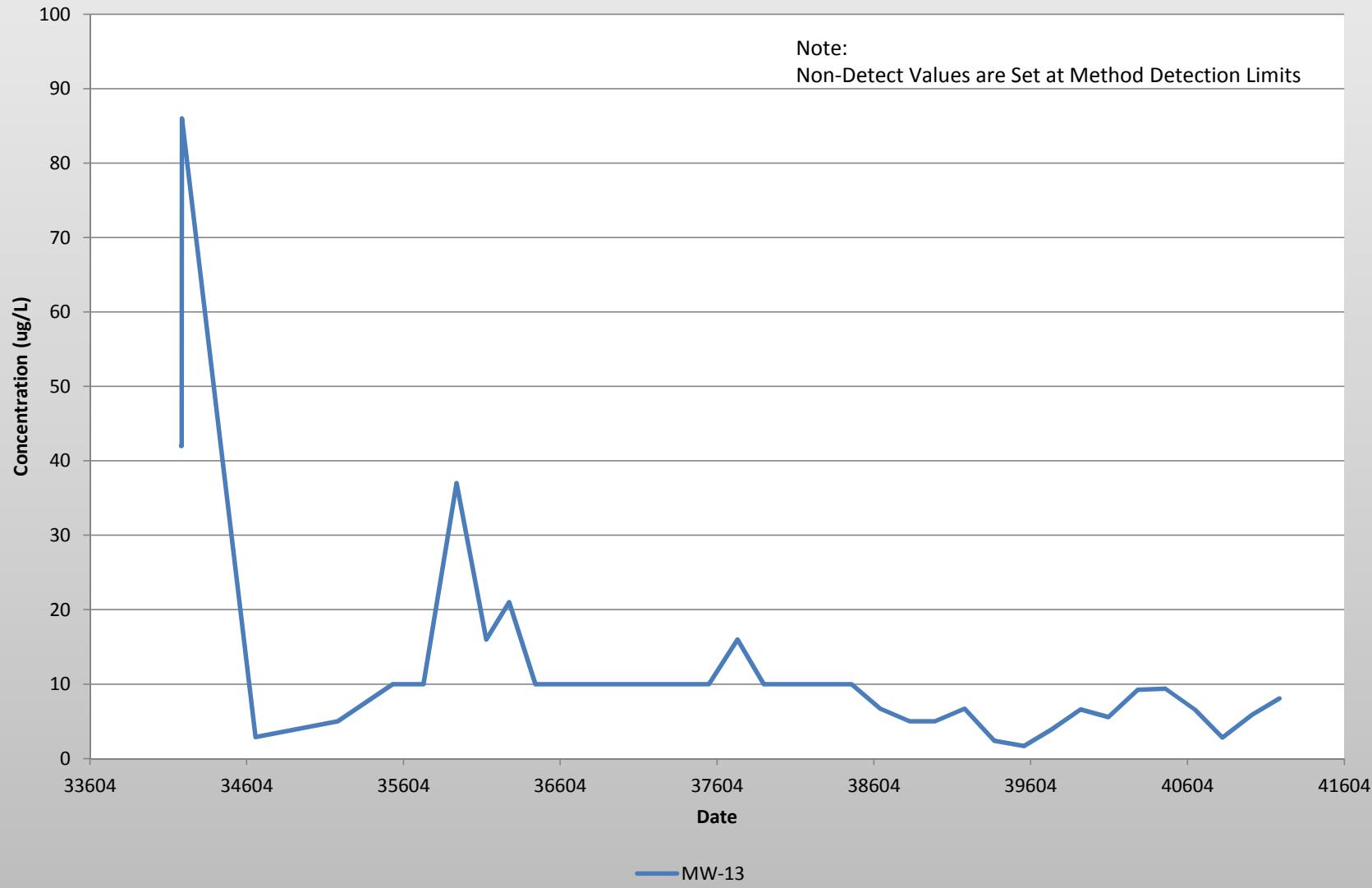
Acetone
Phase 1 and Area "E" Wells With SSI



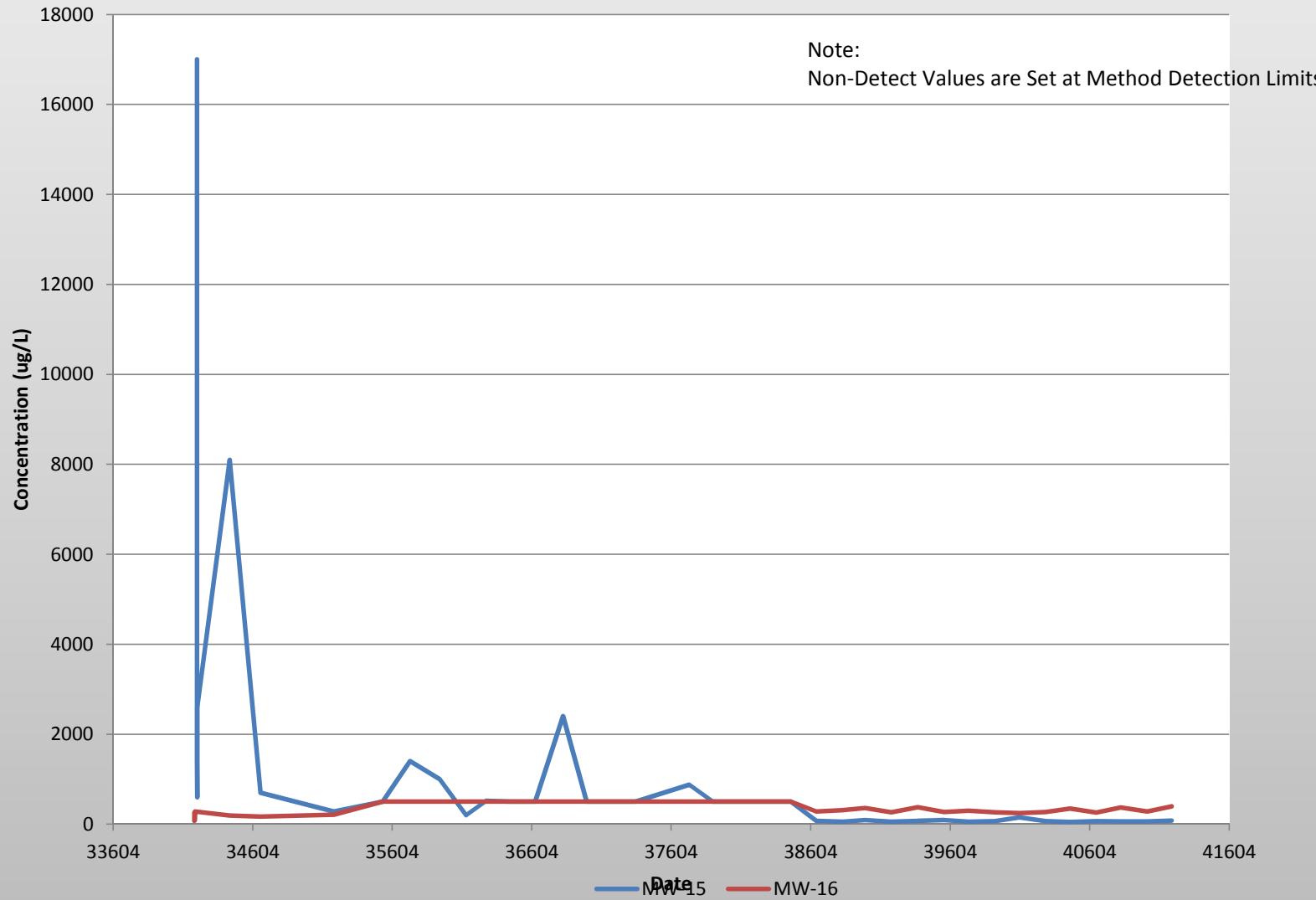
Antimony Phase 3 Wells With SSI



Arsenic Phase 1 and Area "E" Wells With SSI

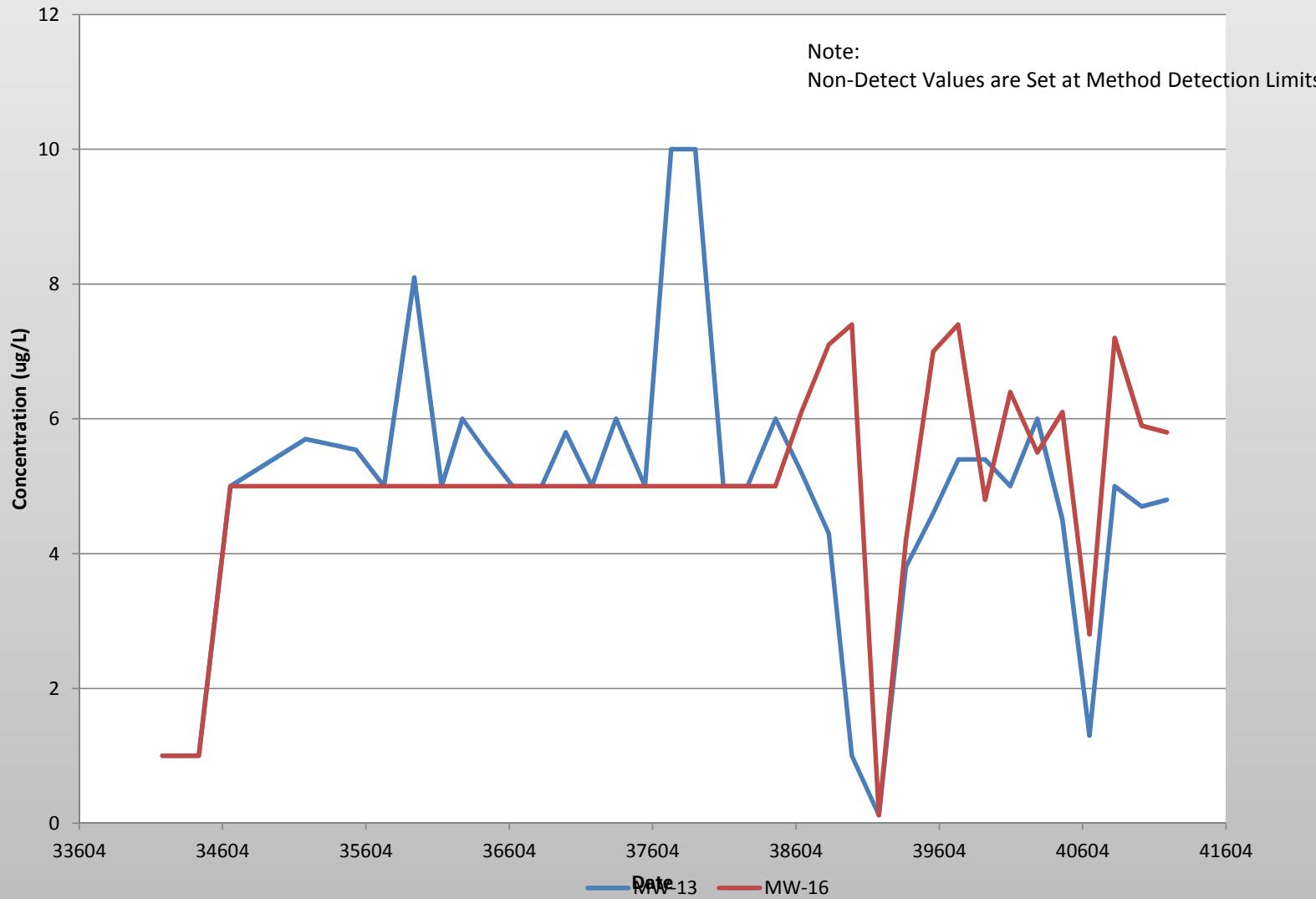


Barium
Phase 1 and Area "E" Wells With SSI

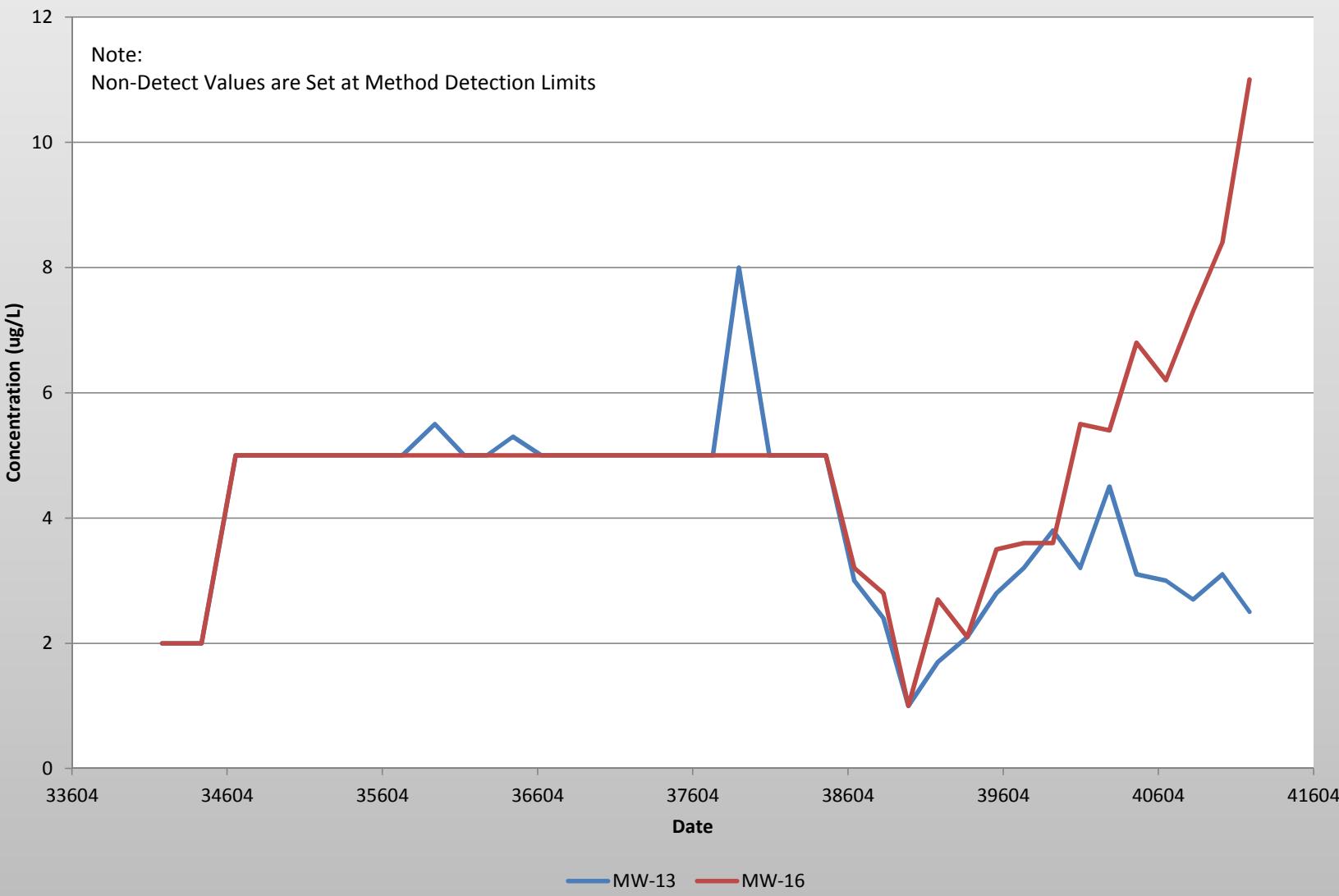


Benzene

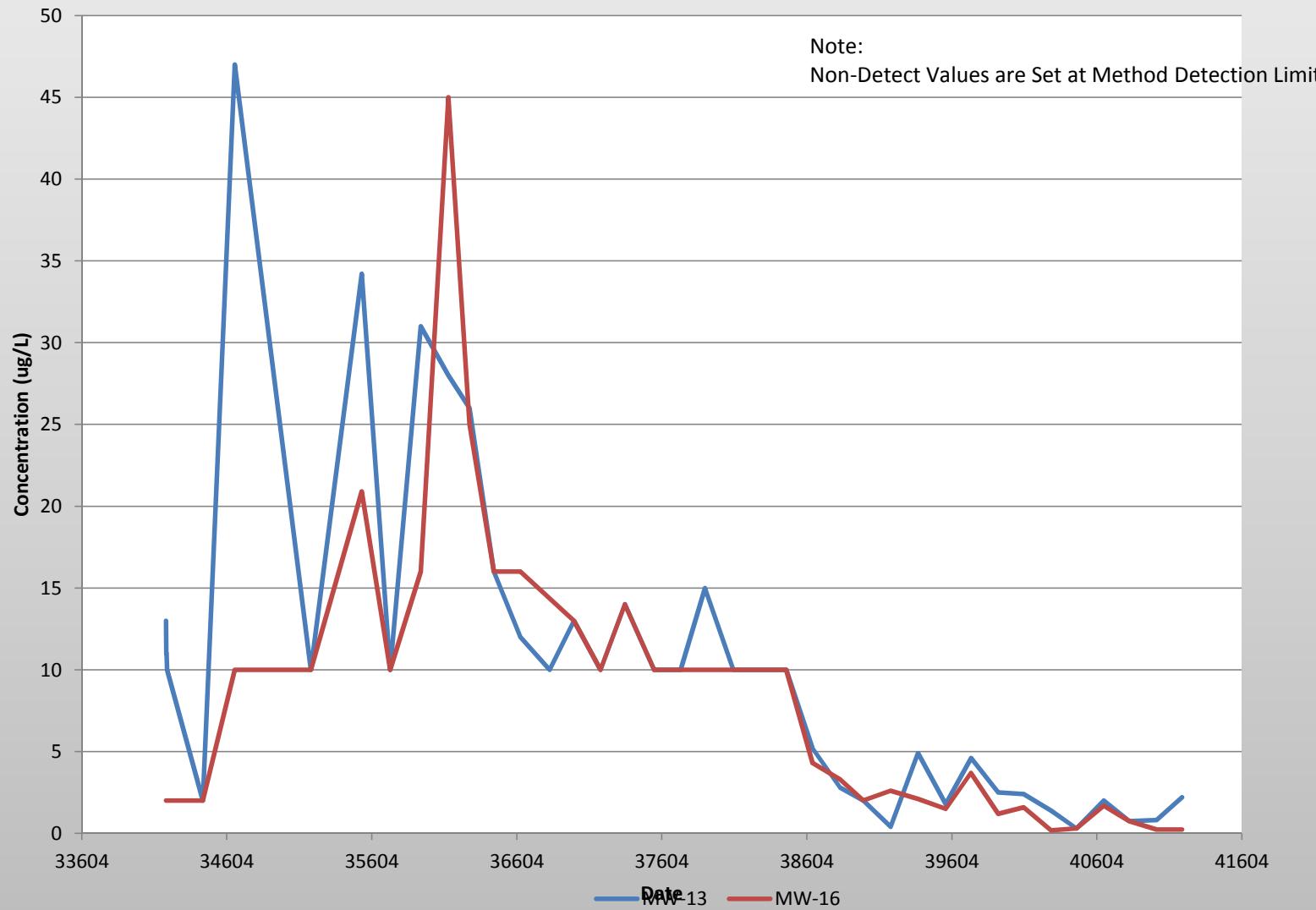
Phase 1 and Area "E" Wells With SSI



cis-1,2-Dichloroethane
Phase 1 and Area "E" Wells With SSI

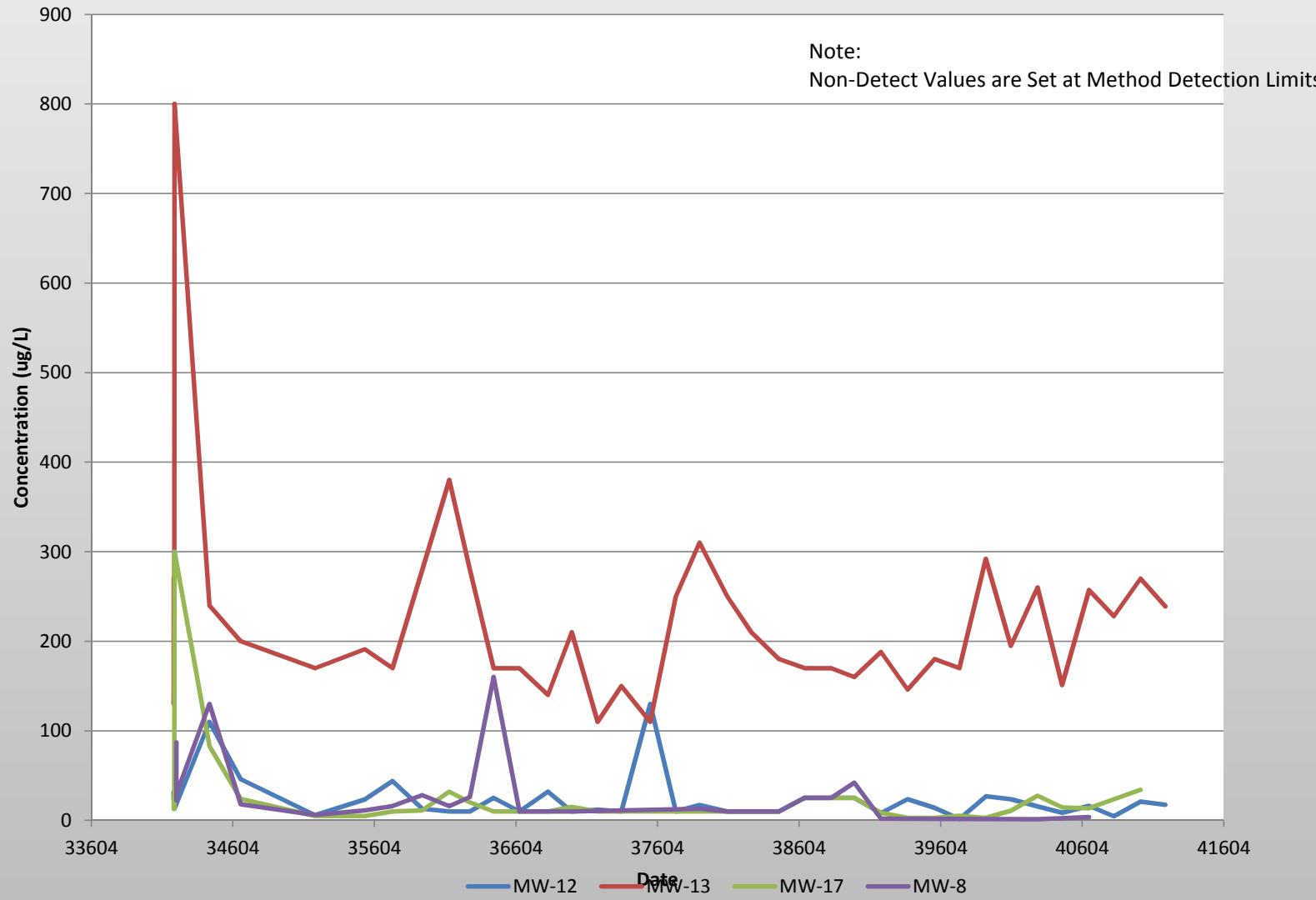


Chloroethane Phase 1 and Area "E" Wells With SSI

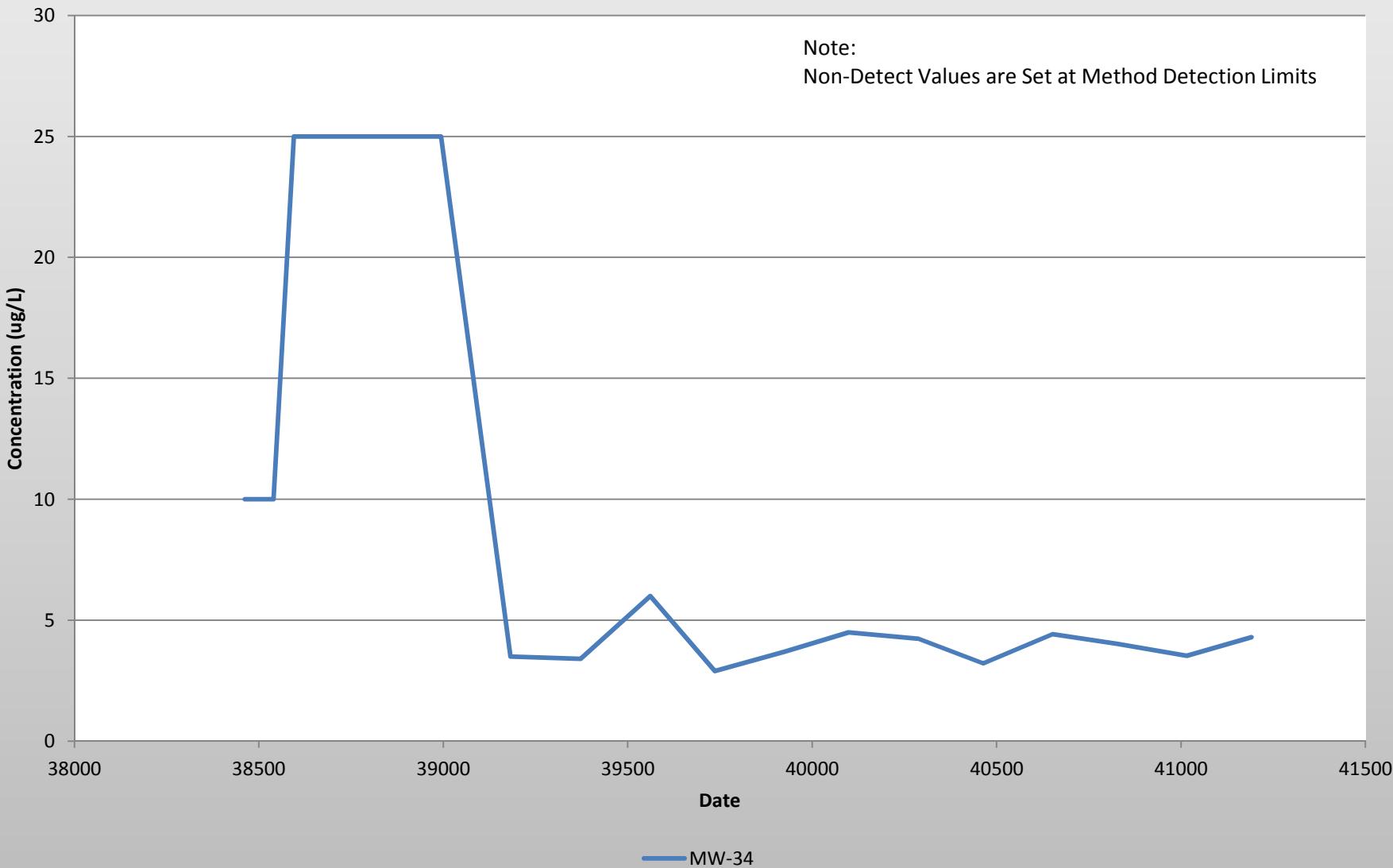


Cobalt

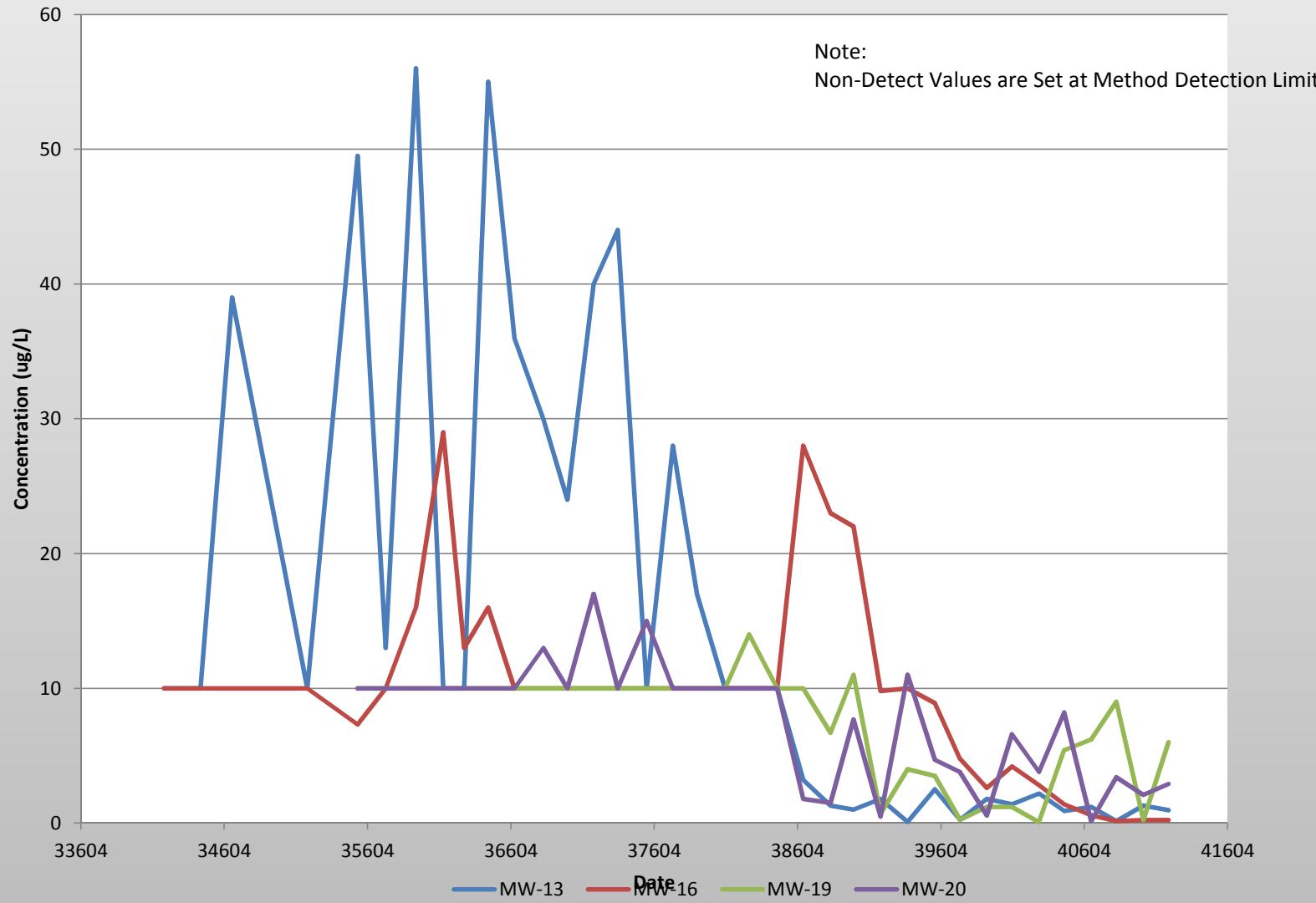
Phase 1 and Area "E" Wells With SSI



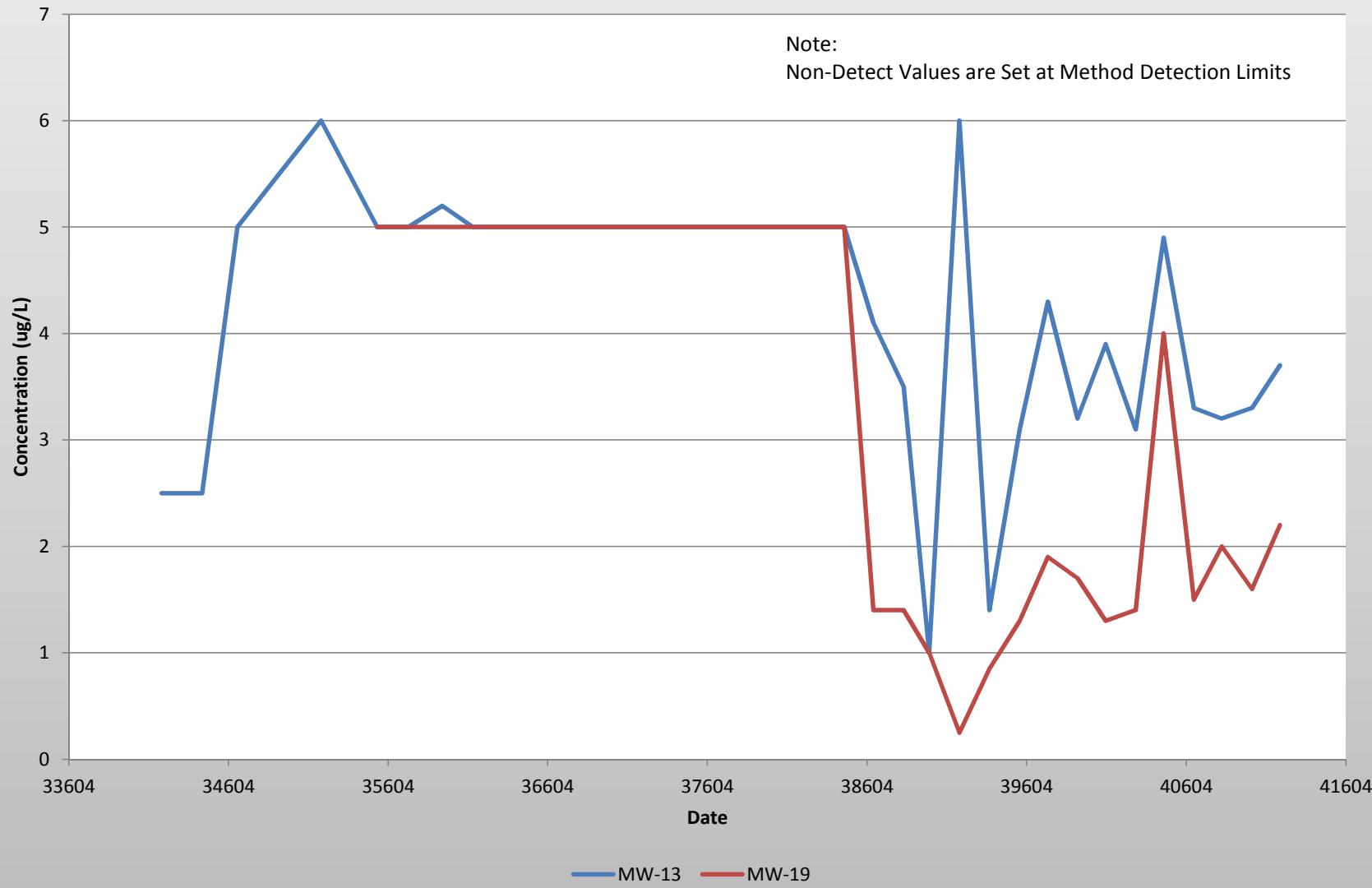
Cobalt Phase 3 Wells With SSI



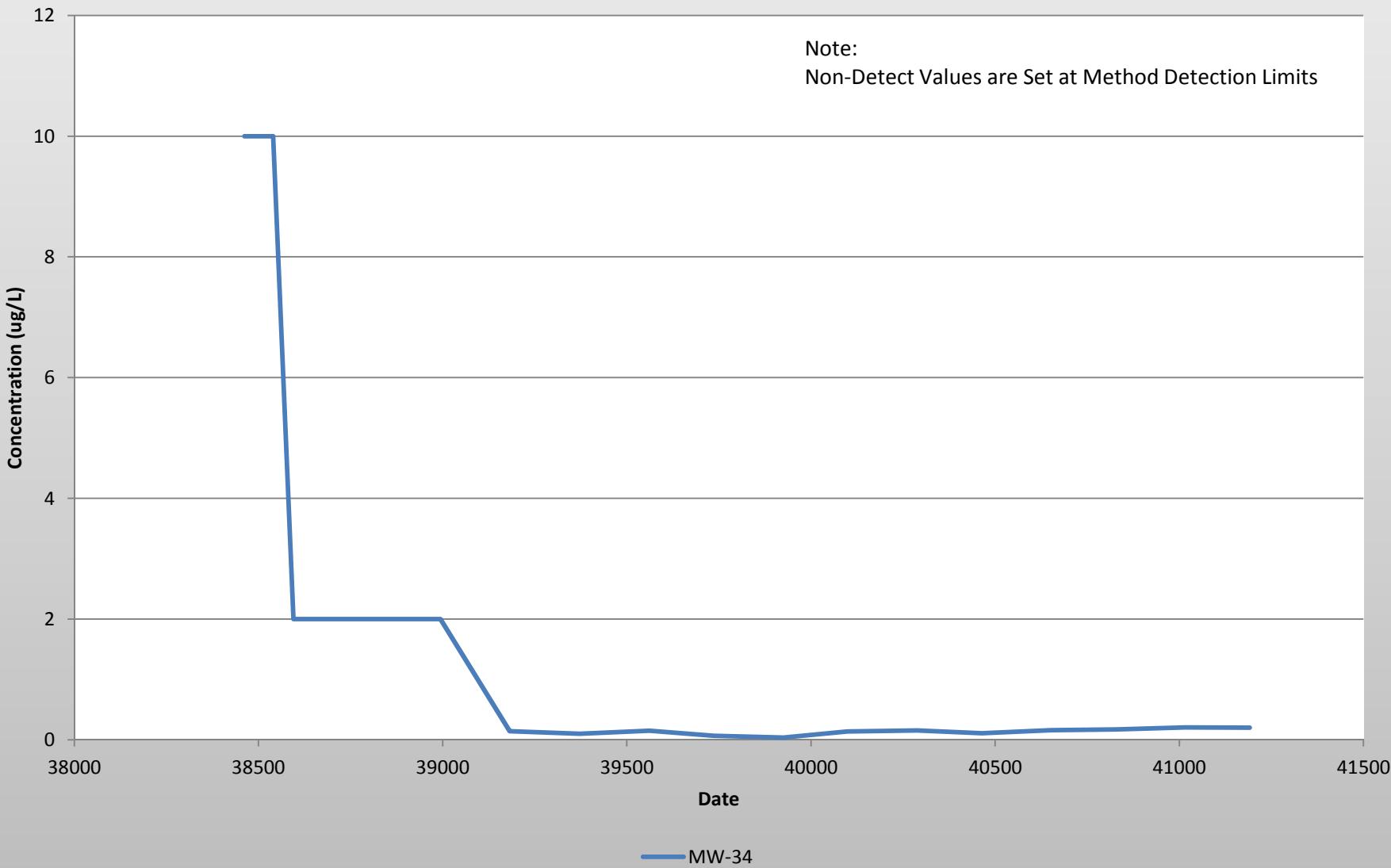
Methylene Chloride Phase 1 and Area "E" Wells With SSI



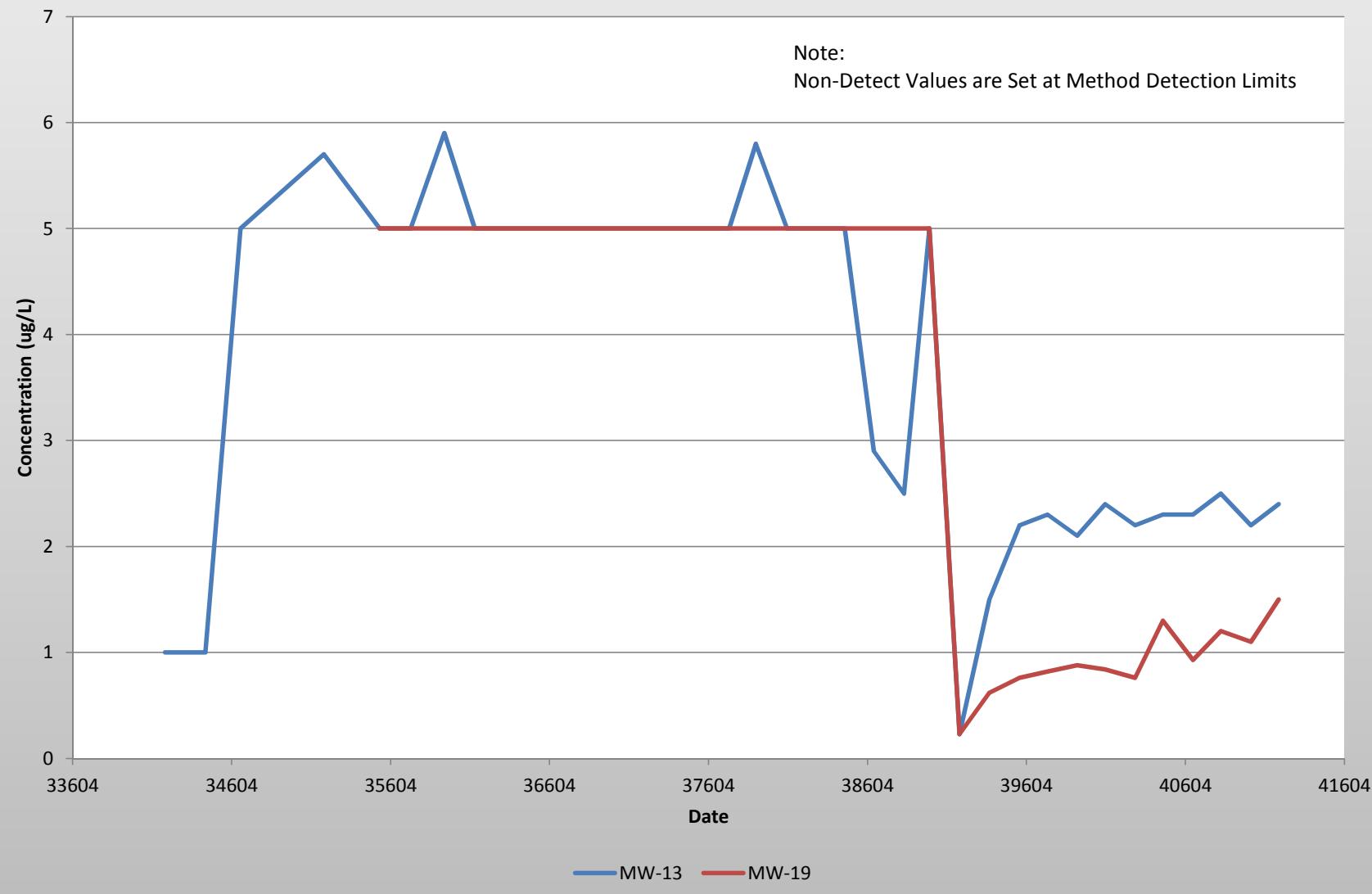
Tetrachloroethene Phase 1 and Area "E" Wells With SSI



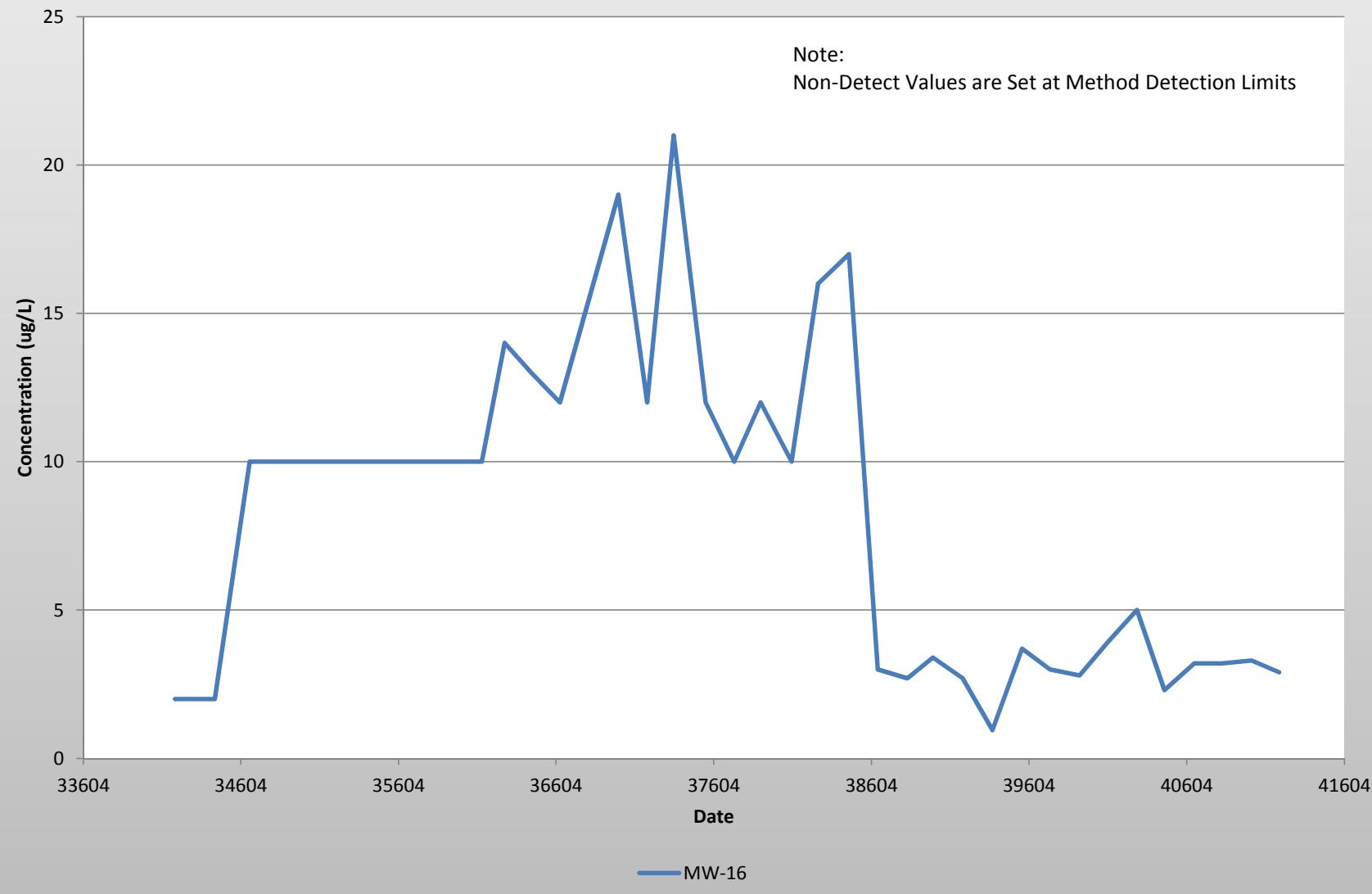
Thallium Phase 3 Wells With SSI



Trichloroethene
Phase 1 and Area "E" Wells With SSI

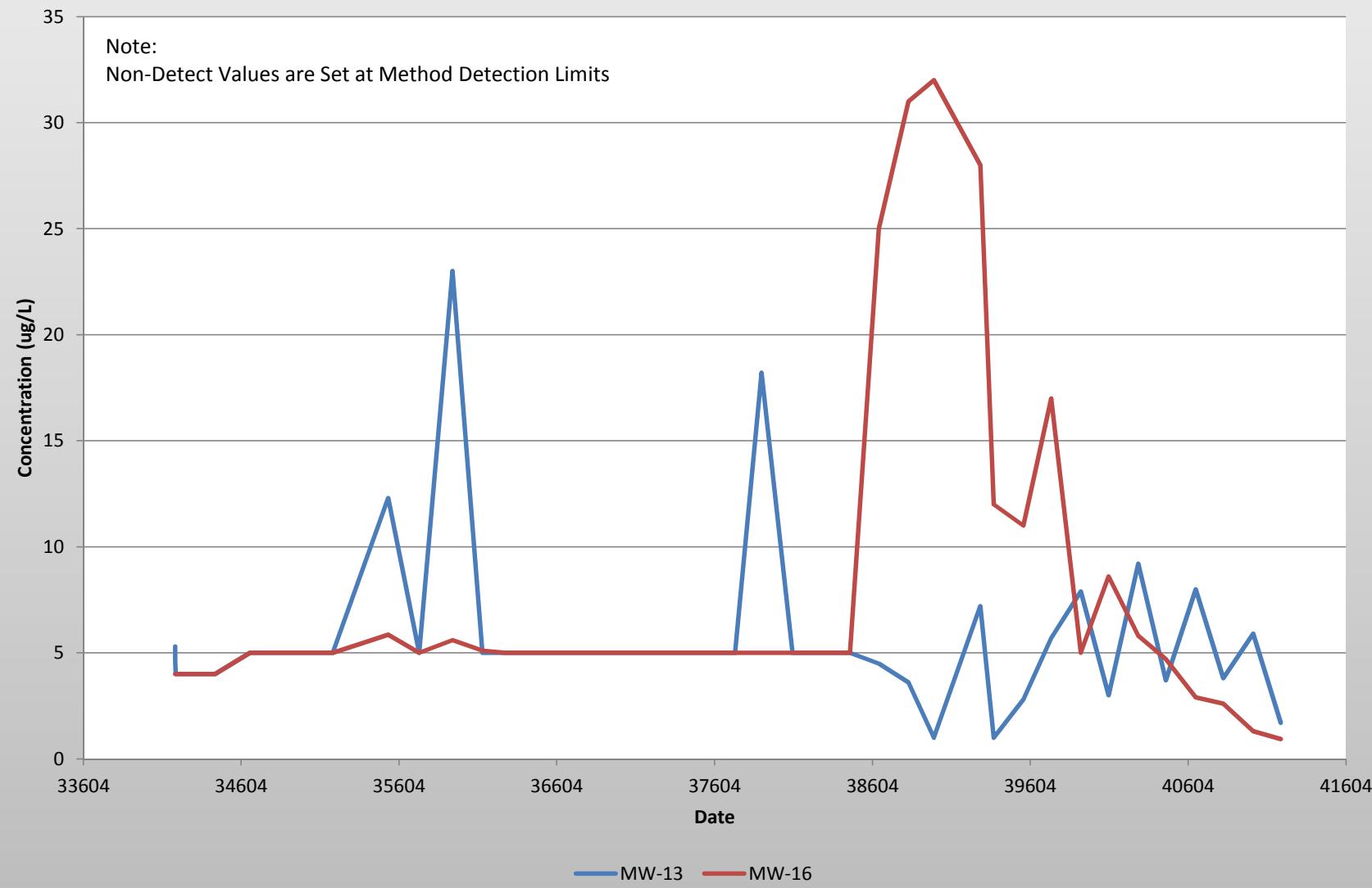


Vinyl Chloride Phase 1 and Area "E" Wells With SSI



Total Xylenes

Phase 1 and Area "E" Wells With SSI



Zinc
Phase 1 and Area "E" Wells With SSI

